Practical Issues Arising from the Introduction of the Euro

74 business days to go before January 1999

Issue No 9 *17 September 1998*

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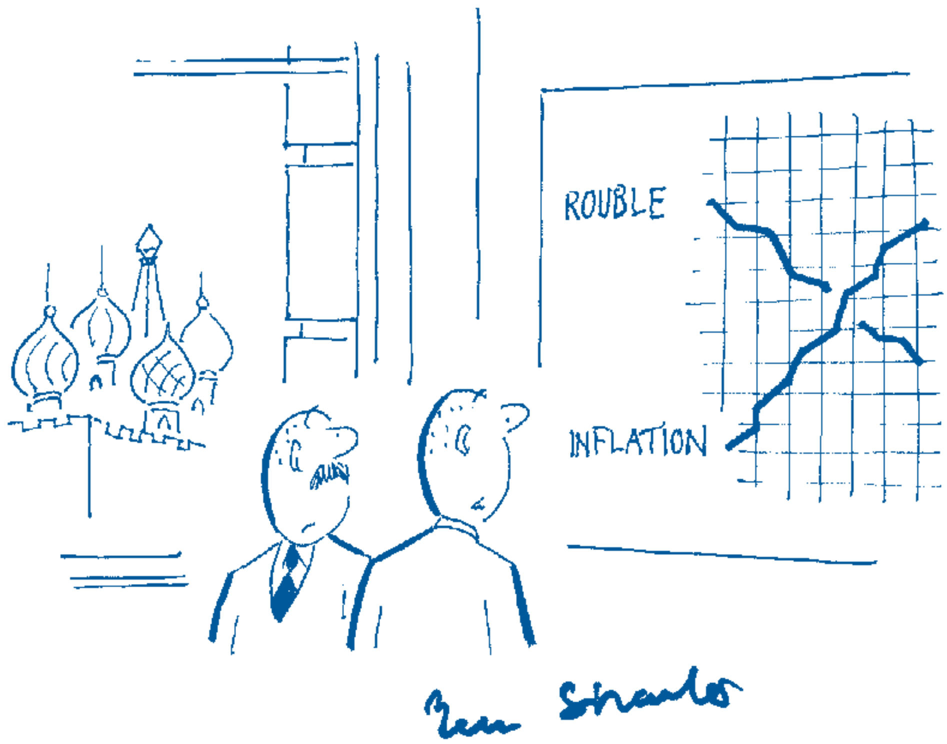


AT LEAST WE DON'T HAVE TO WORRY ABOUT EMU .....

PRACTICAL ISSUES ARISING FROM THE INTRODUCTION OF THE EURO

ISSUE NO 9

17 SEPTEMBER 1998

(*Practical Issues* addressed in previous issues, together with *abbreviations* and *acronyms* and organisations involved, are available on the Bank's website)

Cartoons by Basil Hone

CHAPTER 1: INTRODUCTION

1 This edition of *Practical Issues* is divided into two complementary parts. The first part consists of market guidance for traders and for back-office staff on the changeover to the euro in wholesale financial markets (Chapter 2). This Chapter brings together, in summary, all the available general information that we believe market firms and their counterparties in the wholesale markets need to know before, during and after the conversion weekend about the changeover in prospect. Not all the relevant information is yet available. Where decisions have not yet been taken, the issues outstanding are identified.

2 The second part (Chapters 3-8) consists of an update in the following areas:

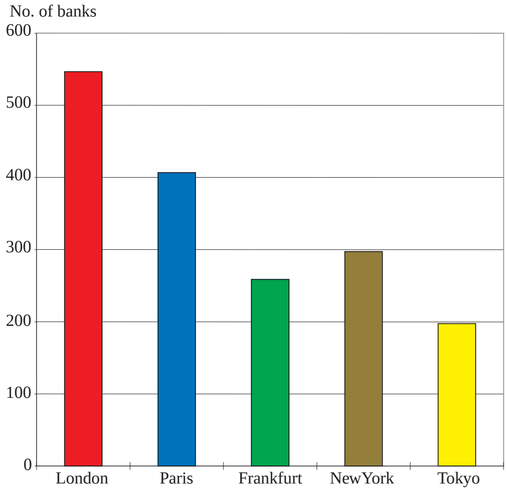
- *The operational framework of the ESCB.* Chapter 3 sets out the main decisions taken by the Governing Council of the ECB since it was established in June, and describes briefly the operational framework for monetary policy in the euro area.
- *Payments and other financial infrastructure*. Chapter 4 reviews recent progress in the preparations in London and elsewhere to facilitate wholesale euro payments and securities settlement from the beginning of next year, including decisions by the ECB on TARGET pricing and on 'out' countries' access to intraday liquidity.
- *Financial institutions' preparations*. Chapter 5 summarises the results of a series of meetings which the Bank has held this summer with a sample of major financial institutions in London to confirm that they are on schedule in preparing for the introduction of the euro, and to identify the technical issues which they consider still need to be addressed.
- *Euro market services in London*. Chapter 6 focuses on the euro products and services that market firms will provide in wholesale financial markets in London from the beginning of next year in order to meet the changes in the marketplace that the euro will bring.
- *Business, retail and public sector preparations*. Chapter 7 summarises recent developments beyond the financial markets in the preparations for UK 'out', and for possible UK entry later.
- *Overarching issues*. Chapter 8 contains an update on legal, accounting, tax and regulatory issues.

3 We will be holding a third euro symposium in the Bank in October (by invitation only, because of space constraints). This will be followed by a further series of roadshows in financial centres overseas to explain the impact of the euro on London's financial markets.

4 Copies of *Practical Issues* may be obtained from the Bank's Public Enquiries Group (tel no: 0171 601 4012; fax no: 0171 601 5460) and are available on the Bank's website. Comments are also welcome, and should be addressed to John Townend, Deputy Director, Bank of England, Threadneedle Street, London EC2R 8AH (fax: 0171 601 5637). We plan to publish the tenth edition in this series in December.

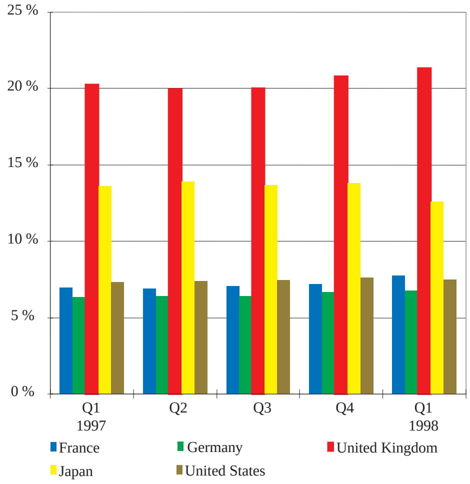
LONDON AS AN INTERNATIONAL FINANCIAL CENTRE

NUMBER OF FOREIGN BANKING INSTITUTIONS (1995)



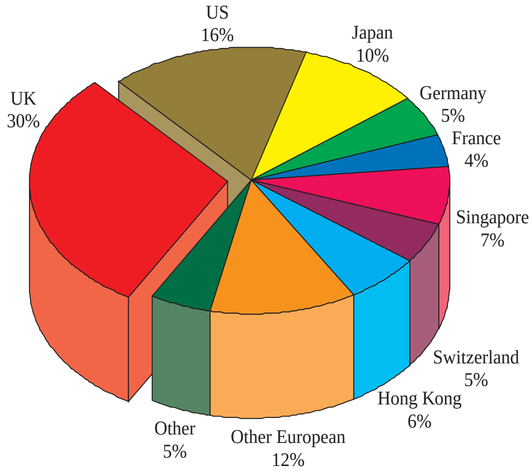
Source: Bank of England

MARKET SHARE OF TOTAL INTERNATIONAL BANK LENDING



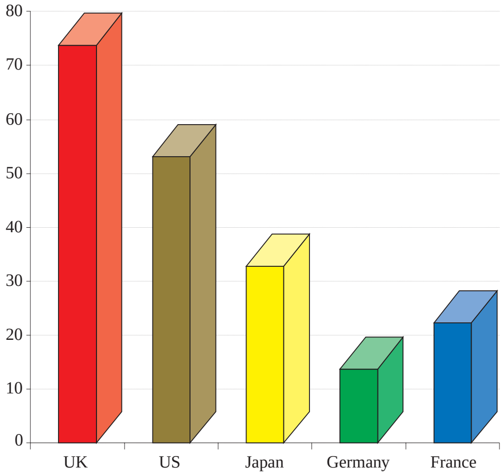
Source: Bank for International Settlements

MARKET SHARE OF GLOBAL FOREIGN EXCHANGE TURNOVER (1995)



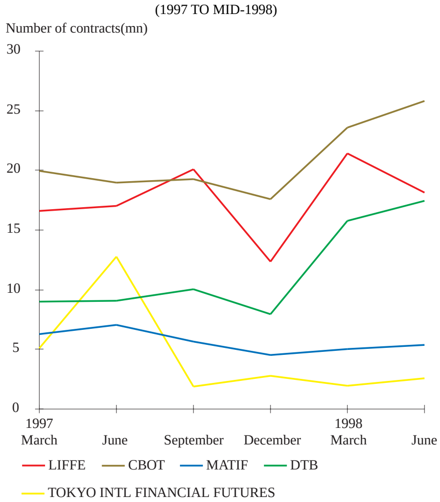
Source: Bank for International Settlements, triennial survey

OTC DERIVATIVES: TOTAL CONTRACT TURNOVER (1995)



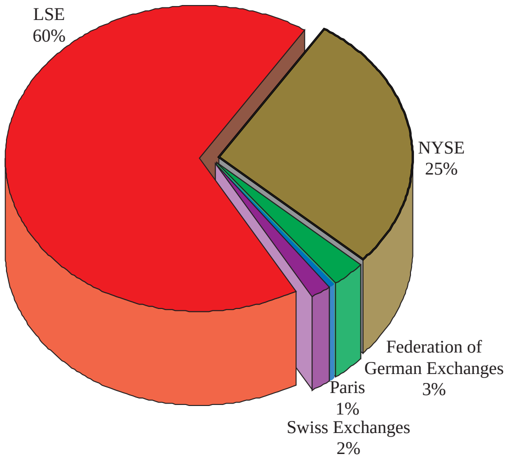
Source: Bank for International Settlements (April 1995)
Net turnover (daily averages)

DERIVATIVE CONTRACT TURNOVER ON SELECTED EXCHANGES (1997 TO MID-1998)



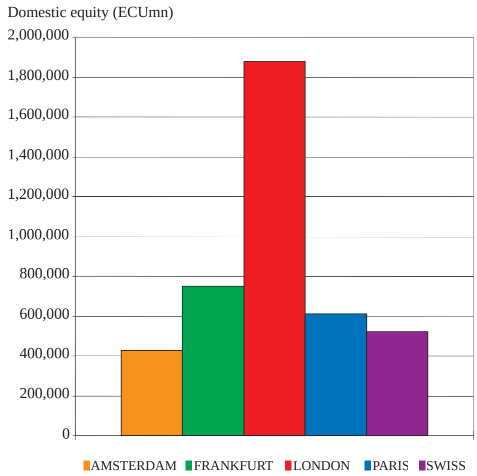
Source: Futures Industry Association

MARKET SHARE OF FOREIGN EQUITY TURNOVER ON SELECTED EXCHANGES (END-1997)



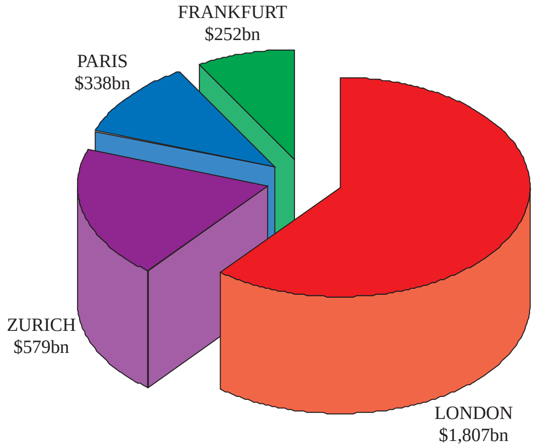
Source: London Stock Exchange

MARKET CAPITALISATION ON SELECTED STOCK EXCHANGES (END-1997)



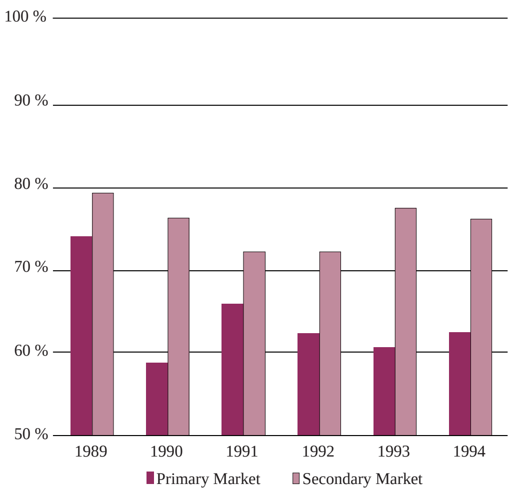
Source: Federation of European Stock Exchanges

HOLDINGS OF INSTITUTIONAL EQUITIES IN TOP FIVE EUROPEAN CITIES (1997)



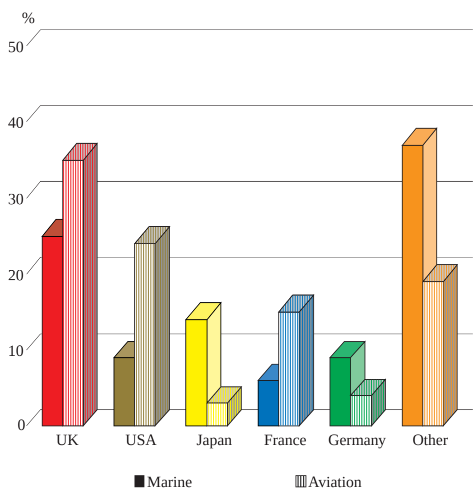
Source: Technimetrics International Target Cities Report 1998

LONDON'S SHARE OF INTERNATIONAL BOND MARKET



Source: Bank of England

MARKET SHARE OF MARINE AND AVIATION INSURANCE (1994)



Source: Lloyd's of London

CHAPTER 2: MARKET GUIDANCE ON THE CHANGEOVER TO THE EURO IN WHOLESALE FINANCIAL MARKETS

1 This Chapter provides market guidance on the changeover to the euro in wholesale financial markets. It is set out in three parts.

- The first part is intended to inform traders in the euro markets from 4 January 1999, but may also be of interest to back-office staff.
- The second part is directed to back-office staff and is divided into three sections: a section on euro payments and settlement, which will remain relevant after the conversion weekend; a section on the conversion weekend itself; and a section on market documentation.
- The third part concerns legal, accounting, tax and regulatory issues, which may be of general interest.

A GUIDANCE FOR EURO MARKET TRADERS FROM 4 JANUARY 1999

2 When markets open on 4 January 1999, the national currencies of participating Member States will have been replaced by the euro as their single currency, and the national currency units of that currency will have been irrevocably locked against each other and against the euro unit. The euro will also have replaced the ECU on the basis of one for one.

3 The conversion rate for each participating national currency *against the euro* will be fixed on 31 December, using the 11.30am CET official ECU fixing. It is intended that these rates will be announced in the early afternoon of 31 December. They will be final and definitive. The Bank of England will publish these euro conversion rates on a new Reuters page at BOE/EURO and on its euro website. A dummy BOE/EURO page is now available. WM/Reuters' approach to closing ECU and euro rates is set out in Chapter 4.

4 It was announced in May that the rates at which the participating currencies will be irrevocably locked *against each other* from 1 January 1999 will be based on their ERM central rates. They are set out in Table 1.

TABLE 1: ERM BILATERAL CENTRAL RATES TO BE USED IN DETERMINING THE IRREVOCABLE CONVERSION RATES FOR THE EURO

	DM100=	BF/LF100=	SP100=	FF100=	IEP1=	ITL1000=	DF100=	AS100=	ESC100=	FM100=
DM										
BF/LF	2062.55									
SP	8507.22	412.462								
FF	335.386	16.2608	3.94237							
IEP	40.2676	1.95232	0.473335	12.0063						
ITL	99000.2	4799.90	1163.72	29518.3	2458.56					
DF	112.674	5.46285	1.32445	33.5953	2.79812	1.13812				
AS	703.552	34.1108	8.27006	209.774	17.4719	7.10657	624.415			
ESC	10250.5	496.984	120.492	3056.34	254.560	103.541	9097.53	1456.97		
FM	304.001	14.7391	3.57345	90.6420	7.54951	3.07071	269.806	43.2094	2.96571	

5 In the euro markets, all weekdays will be business days except Christmas Day and New Year's Day when they fall on a weekday.

Money and foreign exchange markets

6 *New money and foreign exchange transactions* and associated derivatives in wholesale markets are expected to be denominated in euro instead of national currency.

- The recommended day-count convention for money market instruments and Treasury bills, both for interest calculation and discounted yield, and for syndicated bank loans and FRNs, is actual/360.
- The standard settlement convention in the money and foreign exchange market will remain 'spot' (ie T+2), with interest accrual in the foreign exchange market beginning on the second day after the deal has been struck. Trading in the money and foreign exchange market is also expected to occur for cash (ie T+0) and overnight (ie T+1) settlement. Information providers intend to show euro rates for T+0, T+l and T+2 settlement.

7 *Outstanding national currency transactions* in money and foreign exchange and associated derivatives will remain in national currency unless and until the parties agree bilaterally to convert to euro. Existing market conventions are expected to be retained for existing instruments.

8 *Foreign exchange quotations*. It is not yet clear whether the recommendation, made by the EMI and endorsed by market associations, that the euro should be quoted in the foreign exchange market on a 'certain for uncertain' basis (eg €1 = £0.6854) will be universally adopted. European central banks (the ECB and NCBs, including the Bank of England) will use this proposed convention in their market operations. And on the Continent, all market euro quotes, including against sterling and the dollar, are expected also to conform to this convention.

9 However in London, New York and Tokyo, a common view has not yet emerged amongst the major market participants in the interbank market about how sterling and the US dollar will be quoted against the euro (the basis of yen quotes will clearly be the same as now).

10 In London, the Bank of England and the BBA have emphasised that it would help minimise confusion and avoid misunderstanding if wholesale market participants were universally to adopt the proposed euro convention of 'certain for uncertain'. The Bank and BBA have made this recommendation in the full knowledge that it would involve changing current practice for both sterling and the dollar, and would in consequence have system implications. There is, however, a risk that dealer 'inertia' may in practice lead to quotes continuing to be made on the 'old' basis, at least for a time until a common agreed practice emerges. This could happen quite quickly in the New Year, as liquidity comes to concentrate on the preferred method of quotation. But until it does, banks, other financial institutions and brokers will regrettably need to prepare to make and receive quotations both ways round for the euro against both sterling and the dollar, which will entail costs and the risk of error.

11 The London Wholesale Markets Brokers' Association (WMBA) believes that voice brokers will quote the euro on either basis until a clear customer preference emerges; and the Reuters'

electronic broking system, which has recently been reconfigured to allow 'dual quotation' of the ECU (against both £ and $), will similarly be able to provide dual quotations for the euro (against both £ and $) from the New Year. This is also true of the EBS Partnership. But where there are dual quotations, the electronic broking systems will treat each currency independently, because it is only possible to deal in round amounts (eg $5 million or €5 million). As a result they will not be able to provide automatically a best bid and offer service in each currency pair. This is likely to give further impetus to the establishment of a single convention.

12 It is important to note that the new recommended convention only applies to sterling (and dollar) quotations against the euro; against all other currencies, including against the 'in' currencies during the transition period, sterling (and the dollar) will continue to be quoted on the current basis.

The position now						**The position in future**					
	£	$	DM	¥	ECU		£	$	DM	¥	€
£	-					£	-				
$	£:$	-				$	£:$	-			
DM	£:DM	$:DM	-			DM	£:DM	$:DM	-		
¥	£:¥	$:¥	DM:¥	-		¥	£:¥	$:¥	DM:¥	-	
ECU	£:ECU	ECU:$	ECU:DM	ECU:¥	-	€	?	?	€:DM (locked)	€:¥	-

13 The BBA reports that, whatever emerges in the *wholesale* market, banks propose to provide euro quotes to *retail* customers on the same basis as at present for the DM (eg £l = €1.4589), on the ground that in this area a change in convention would be more likely to confuse.

14 *ECB reference exchange rates*. There will not be a euro area-wide official fixing procedure for the euro involving the ESCB. However, since there is a need for the daily publication of reference exchange rates, the ECB will compute and publish reference exchange rates for the euro on a daily basis for sterling, the US dollar, the Japanese yen and a wide range of other currencies.

- These reference rates will be based on the regular daily concertation procedure between central banks, which normally takes place at 2.15pm CET. The reference exchange rates will be published via electronic market information providers shortly after the concertation procedure has been completed.
- Only one reference exchange rate (ie the mid-rate) per currency will be published, using the 'certain' method (ie €1 = $x etc).
- The number of significant digits used may vary between the currencies, reflecting market conventions. However, in most cases five significant digits will be used.
- The 'in' NCBs may publish more comprehensive lists of euro reference exchange rates than that published by the ECB.

15 *Euro LIBOR*. The BBA's proposals for euro LIBOR can be summarised as follows.

- When Stage 3 begins, the BBA will cease to fix LIBOR for the ECU and replace it immediately on the same screen page with a LIBOR fixing for the euro (one for one).
- Euro LIBOR will be fixed 'spot'. A cash euro fixing will also be provided if there is sufficient market demand.
- Euro LIBOR will be fixed on the basis of rates quoted to the London offices of 16 major banks active in the euro market at 11.00am London time on all London or euro business days. In June, the BBA identified these banks: the panel will consist of domestic and foreign banks broadly representative of the market's liquidity.
- The fixings on the last two London business days of 1998 (ie on 30 and 31 December) will be euro fixings for value on 4 and 5 January 1999 respectively. They will be fixed by the new panel.
- The day-count basis for calculating interest accrual for euro LIBOR will be the actual number of days elapsed, divided by 360. This is consistent with the current definition of most national LIBOR rates. But Portuguese escudo LIBOR rates, which are currently based on an actual/365 basis, will be rebased on an actual/360 basis from 30 December 1998, although actual/365 equivalents will be calculated and published for screen users' convenience.
- Settlement rates for national currencies for which LIBOR is currently calculated and which participate in the euro will continue to be published during the transition period. The rates for national currency units will be identical to those for euro units from 30 December 1998. There will not be separate panels for rates in national currency units.

16 *EURONIA* (Euro Overnight Index Average) is to be created in London by the WMBA, in conjunction with the BBA, to support the euro overnight index swap market. It will be the average rate, weighted by volume, of all unsecured overnight euro deposit trades arranged by participating brokers in London only. Both counterparties must be listed money market institutions (under the Financial Services Act, Section 43). The index will be based on volume and rate information supplied by the brokers, and published on the same day that it is calculated. The WMBA has been publishing SONIA (Sterling Overnight Index Average) since March 1997.

17 Within the euro area, *EURIBOR* will in most cases be the designated successor to national currency price sources, except for overnight rates, which will be replaced by EONIA (see Table 3 at the end of this Chapter). EURIBOR will be fixed at 11.00am CET for 'spot' value on all euro business days.

18 *EONIA* (Euro Overnight Index Average) will be computed with the help of the ESCB as a weighted average of all overnight unsecured lending transactions undertaken in the euro area interbank market by banks on the reporting panel. It will be fixed not later than 6.30pm on all euro business days.

19 *Interest rate swaps*. ISDA recommends that the euro conventions apply to new euro swaps, including use of TARGET business days, money market day-count conventions for floating legs,

and bond market day-count conventions for fixed legs. ISDA also recommends that existing swaps be 'settled as dealt' and retain existing conventions, even if price sources change.

20 *STIRs*. LIFFE believes that, as there is an increasing level of certainty that EMU will go ahead and prove sustainable, demand for parallel listing of STIR contracts in both euro and national currency is diminishing, and demand for a mandatory conversion of STIR contracts is increasing. Mandatory conversion would provide a simple, cost-effective method of guaranteeing a single pool of liquidity. The LIFFE Board has therefore decided to ask its members at the end of September to endorse a new rule that would allow it mandatorily to convert STIR open interest into LIFFE's euro contracts. If the market's confidence in EMU persists, LIFFE would then announce at some later date a mandatory conversion of all STIR contracts. This would make its voluntary position conversion facility unnecessary. In any event, participants will be able to use a pit-based spread trading facility to convert contracts if they wish.

Bond markets

21 In wholesale markets, consideration on bond trades will generally be paid in euro, whether or not the bonds have been redenominated into euro from national currency. Payments of interest and repayments of principal will generally be made in euro.

22 All *new issues of government debt* by participating Member States will be denominated in euro rather than national currency. Non-government issuers are expected to follow suit. The conventions recommended by the European Bond Commission of EFFAS, ISMA and IPMA are as follows.

- Bond coupon rates and prices should be quoted in decimals.
- The recommended day-count convention for fixed rate bonds is actual/actual. This means that, for standard interest periods, accrued interest (AI) is calculated as follows:

  $$AI = t/s \times c/n$$

  where t = the actual number of calendar days elapsed (from and including the previous interest payment date to and excluding the settlement date);
  s = the actual number of calendar days in the current interest period (defined as the period from and including the previous interest payment date to and excluding the next interest payment date);
  c = the annual rate of interest per €100 nominal of the bond; and
  n = the number of interest payments per annum.

  This is the definition used in the French and US government bond markets, and to be used in the UK gilt-edged market as from 1 November.
- When calculating years and fractions of years in yield calculations, time should be counted backwards from the final contractual cash flow.
- Stripped bonds should be quoted on a yield basis, using actual/actual.
- Coupon frequency will continue to vary (eg between annual and semi-annual coupons). Fixed rate bonds should have equal periodic payments: eg each interest payment on a semi-annual bond equals half the annual coupon. The last coupon period should not be

irregular. Redemption of bonds, as well as coupon payments, on 29 February should be avoided.

- The standard for internationally traded cross-border bond transactions will continue to be T+3.

23 There are differences in practice as to how the recommended day-count convention for the euro bond market of actual/actual should be applied, depending on the type of market or location. For example, under the ISDA approach, the denominator for calculating a payment is set at 366 for any portion of a calculation period falling within a leap year, and at 365 for any non-leap year portion. In contrast, under ISMA rules, the denominator is the actual number of days in the coupon period multiplied by the number of coupon periods in the year. In the light of the potential confusion that these differences may cause, a number of market associations are working on more detailed guidance and exploring the possibility of a harmonised approach.

24 Almost all existing issues of marketable government debt in national currency by participating Member States and some other issuers will have been *redenominated* over the conversion weekend. Redenomination involves changing the nominal amount from national currency into euro. All participating governments propose to redenominate to the nearest euro cent, except for France (which will round down to the nearest euro and cash out the residual), and the Netherlands (where the normal approach will be to round up to the euro). In all cases, redenomination will take place at the level of the investor holding, except for Austria (each individual bond) and Italy (the minimum nominal denomination) (see Table 4).

WORKED EXAMPLES OF SECURITY REDENOMINATION

Some of the main methods of security redenomination are illustrated here: firms will need to ensure they apply the correct conversion procedure for every security they redenominate.

A Rounding to the euro cent by investor holding - the ‘German’ method

Principle	Round to the nearest euro cent with no cash compensation.
Example	Germany 5.25 pct 4 Jan 2008 Investor holding on 31 December 1998: DM100,000 Assumed conversion rate: €1 = DM1.92573
Calculation	Unrounded new holding: 100,000 / 1.92573 = €51,928.359…etc Rounding to the nearest euro cent gives: €51,928.36
Users	This method has been generally adopted by the governments of Belgium, Finland, Luxembourg, Ireland, Germany, Portugal and Spain. *(There is no change of ISIN codes associated with this method.)*

B Rounding to the euro cent by individual lot - the ‘Austrian’ method

Principle	Redenominate a single lot of nominal to the nearest euro cent and then multiply the redenominated lot by number of lots held.
Example	Austrian 8.125 pct 20 May 2000 Investor holding on 31 December 1998: AS100,000 comprising 10 lots of AS10,000 Assumed conversion rate: €1 = AS13.5485
Calculation	Redenominated lot: 10,000 / 13.5485 = €738.089…etc Redenominated lot rounded to the euro cent: €738.09

	Multiply redenominated lot by number of lots held: €738.09 x 10 lots = €7,380.90
Users	This method has been generally adopted by the Austrian and Italian governments. *(There is no change of ISIN codes associated with this method.)*

C Rounding down to the whole euro - the 'French' method

Principle	Round down to the nearest euro with cash compensation.
Example	French OAT 5.5 pct 25 Apr 2004 Investor holding on 31 December 1998: FF100,000 Assumed conversion rate: €1 = FF6.54321
Calculation	Unrounded new holding: 100,000 / 6.54321 = €15,283.0185796…etc First truncate security nominal after the fifth decimal: €15,283.01857 Round security nominal down to the nearest whole euro: €15,283.00 Cash compensation due is the market value of €0.01857 nominal, plus accrued interest, rounded to the nearest euro cent.
Users	This method has been generally adopted by the governments of France (apart from OAT strips) and the Netherlands. *(ISIN codes will change with this method.)*

D Rounding down to the nearest 25 euro cents – the 'French' method for OAT strips

Principle	Round down to the nearest 25 euro cents with cash compensation.
Example	French OAT strip 25 Apr 2008 Investor holding on 31 December 1998: FF 150,000 Assumed conversion rate: €1 = FF 6.54321
Calculation	Unrounded new holding: 150,000 / 6.54321 = €22,924.527869...etc First truncate security nominal after the fifth decimal: €22,924.52786 Round security nominal down to the nearest 0.25 euro: €22,924.50 Cash compensation due is the market value of €0.02786 nominal, rounded to the nearest euro cent.
Users	This method has been adopted by the French government for OAT strips. *(ISIN codes will change with this method.)*

E Rounding up to the nearest whole euro - the 'Dutch agent' method

Principle	Calculate to nearest euro cent and then round up to nearest whole euro.
Example	Netherlands 7.5 pct 15 Jan 2000 Investor holding on 31 December 1998: NLG100,000 Assumed conversion rate: €1 = NLG2.16979
Calculation	Unrounded new holding: 100,000 / 2.16979 = €46,087.409…etc Round first to the nearest euro cent: €46,087.41 Then round up to nearest whole euro: €46,088.00 The holder has effectively received a gift of security nominal of €0.59
Users	Expected to be adopted by Dutch agent banks, which would make the gift of security nominal to clients from their own positions. *(ISIN codes will change with this method.)*

25 Most participating governments which currently use a day-count convention of 30/360 in their government bond markets propose to change the convention for (ie to *reconvention*) their existing marketable issues to actual/actual so as to be consistent with new debt in euro. But they will not all do so at the same time. Belgium is proposing to reconvention existing marketable debt to actual/actual over the conversion weekend; and Austria, Finland, Germany, Italy, Luxembourg, the Netherlands and Portugal are expected to reconvention each issue on its first coupon date in 1999 (see Table 5). This means that there will be issues changing to actual/actual virtually on a daily basis until the end of 1999, except in the case of Italian issues which have semi-annual coupons and so the process there will be complete by mid-1999. Unless reconventioning takes place on the day of a coupon payment, it will cause a small jump in accrued interest, and possibly a corresponding small adjustment to clean prices in the market.

26 *Non-government issuers*. Some non-government issuers are expected to redenominate their existing national currency debt after the conversion weekend. Where issues are to be redenominated, it is important to check whether the day-count conventions will change, and if so when and on what basis (see Table 6). Apart from Belgium, the position in the euro area is not yet completely clear. In the Belgian domestic regulated market, the day-count convention for existing non-government issues will change to actual/actual in line with government issues for transactions settling after 1 January 1999. In the rest of the euro area, where conventions change for existing government issues, this will take effect from the first coupon date following redenomination. If non-government issuers choose to redenominate and change conventions, it seems likely that many of them will take the same approach. But they are not expected to reconvention prior to redenomination, if they decide to redenominate at all.

27 Where bonds are not redenominated, nominal amounts are expected to continue to be specified in national currency, with consideration paid in euro. The conversion rate on transactions will either apply to the total consideration, or to the clean value, accrued interest, and any commission separately (see Table 6). Interest payments and principal repayments on bonds which are not redenominated are expected to be calculated in national currency and converted to euro only when the cash amounts are paid to investors, with rounding applied to each payment.

28 After a defined period in 1999, some participating Member States may introduce minimum denominations of more than one euro (eg €1,000 in Italy and Belgium and €100 in Spain). In other words, it will only be possible to deal in multiples of this denomination. This may have an effect on the settlement of repos and derivatives such as bond options. ISDA has stated that market participants may need to consider paying out rounding differences as a result of applying minimum lot sizes to the converted euro amount, subject to a *de minimis* threshold of €100. To avoid these problems with the settlement of repo and bond options, market participants have suggested that CSDs continue to allow settlement of nominal values as small as one euro cent for a period of time. By the end of June 1999, most of the affected transactions should have matured.

29 In OTC markets, broker/dealers will quote for odd amounts (eg €1,341,323.41 rather than €1,000,000), but not necessarily for small amounts (eg residual amounts smaller than the new minimum denomination). The ISMA rule book states that, in the international bond market, no reason need be given for not transacting at the normal market price for amounts of less than US$100,000 (or currency equivalent).

30 The IPAA has made a number of recommendations to issuers of international debt instruments from 1 January 1999, including the following:

- Payments of interest and principal amounts due in national currency from 1 January 1999 should be made by issuers to the Fiscal or Principal Paying Agent in euro.
- Interest on redenominated and non-redenominated issues in definitive note form should be calculated on the specified denomination of the notes, and in permanent global note form on the total principal amount outstanding. This is because paying agents cannot make calculations or payments by investor holding, as they do not have access to this information.
- Payment of interest and principal on non-redenominated issues in definitive note form should be made by paying agents to note holders in the amount specified per note, in accordance with the terms and conditions in either euro or legacy currency with no conversion cost to the holder. Definitive notes held by the clearing systems are expected to be paid in euro. Payments of interest and principal on non-redenominated issues in permanent global note form held in the clearing systems should be paid to the clearing systems in euro.
- For issues redenominated into euro which are to be reprinted in definitive note form, the minimum denomination should be not less than that on which interest of at least €0.01 can be calculated. For new euro issues, the minimum denomination should be €1,000.
- If redenominating outstanding debt, the issuer should, at the least, inform the relevant parties of the following: the original ISIN; the new ISIN, if any; the redenomination date, method and basis; the new minimum denomination; rounding rules; any cash compensation and its related tax treatment.

31 *Bond futures*. LIFFE has recently listed Deutschemark bund and lira BTP contracts for March 1999 delivery. The intention is to supplement these by listing later this year the respective euro-denominated contracts for March 1999 delivery. It is probable that only March 1999 delivery months will be listed in parallel in this way, with June 1999 delivery months being listed solely in euro. LIFFE is considering what facilities to offer to convert the national currency contracts (ie Deutschemark and lira) into the parallel euro contracts. The introduction of APT trading of bund and BTP contracts means that it will not now be possible to provide pit-based spread trading facilities. If required, LIFFE may offer a clearing system-based voluntary position conversion facility, as originally planned; or else it may apply a mandatory conversion procedure to consolidate open interest in the respective March 1999 contracts. A final decision will be announced by the end of September. A summary guide to the conversion of exchange-traded derivatives in the euro area is contained in Table 7.

32 LIFFE's *LIBORfinancedbond* futures contract, which is to be launched in the fourth quarter, will provide the interest rate swaps market with an exchange-traded instrument matching the price sensitivity of interest rate swaps at specific points on the swap yield curve. The contracts will be targeted at the 5-year and 10-year points on the DM, and subsequently the euro, swap curves. They will be electronically traded from the outset.

33 *OTC bond options*. In the case of OTC bond options, the introduction of the euro will have no effect on existing transactions where neither redenomination nor changes to day-count conventions occur. In those cases where one or other of these changes does occur, bond options may be affected when redenomination either involves significant renominalisation to greater than one euro, which alters the economic value of the bond, or reconventioning leads to a jump in accrued interest large enough to move the clean price of the bond. In the case of reconventioning, ISDA believes that calculation agents should be allowed to adjust the terms of the bond option (eg the strike price) to preserve its theoretical value. In the case of significant renominalisation, ISDA believes that it is preferable to retain the existing strike price for the new rounded nominal amount and to cash-settle the value of the option on the cashed-out element. ISDA recommends that firms carefully assess the impact of reconventioning and renominalisation on asset swaps and repackaging structures, case-by-case.

Equity markets

34 *Share trading*. Whereas bonds are traded in nominal amounts and priced as a percentage of the par value of the debt, shares are traded by number and valued at the quoted price. The important change in the equity market is therefore conversion of quoted prices from national currencies to the euro by stock exchanges within the euro area. Participating exchanges will convert share prices to euro during the conversion weekend.

35 On the London Stock Exchange (LSE), all quotes and trade reports for euro area securities will be in euro from 4 January 1999. Price formation for UK securities denominated in sterling will continue in sterling on 4 January 1999 and beyond. There will be no dual order books. While price formation occurs in sterling, the demand for trading and settlement in euro will be met by the currency conversion facilities already provided by a large number of participants in the equity markets in London.

36 The LSE will be prepared to switch from sterling to euro order books on a stock-by-stock basis, or *en masse*, at any time after 4 January 1999. The criteria for such a switch will be based on: whether or not the company has redenominated its shares into euro; the proportion of trading being settled in euro through CREST; and whether there is adequate provision for retail investors to continue to trade in sterling. A minimum notice period for switches will be set.

37 If a traditional option is open on a security in which trading moves from sterling to euro, the option money will be paid in the initial currency agreed. The strike prices and result of the option bargain will need to be converted to match the underlying security. The intention is for this conversion to happen on the night prior to the stock changing its basis, with the exchange rate at 4.00pm London time being adopted for the purpose. The source of the exchange rate has yet to be agreed.

38 *Share redenomination and no par values*. Most UK companies have not indicated that they intend to redenominate their share capital into euro while the UK is ‘out’, but equally they support a simplified procedure to enable them more easily to do so if they wish at any time after 1 January 1999. They have also expressed strong support for changes to the Companies Acts to permit ‘true’ no par value shares. Such shares would avoid the complication of companies having to renominalise their shares to achieve round par values after conversion to the euro.

39 Where the share price of a UK company changes to euro, the choice of exchange rate used for conversion will need to be determined. A UK company intending to redenominate its share capital from sterling into euro will also need to fix a €:£ exchange rate. Ideally, this should be a market rate on the day of the change. For practical reasons, however, the DTI is considering allowing companies to determine a rate in advance.

40 The LSE has stated that ISIN and SEDOL codes will remain unchanged in the event of an equity being redenominated. If a company combines redenomination with a change to its capital structure, a new ISIN may be issued, but existing rules will apply.

41 *Indices*. FTSE International intends to include all companies that are domiciled in the UK for tax purposes in its UK indices (FTSE 100 etc), even if their share prices are quoted in euro or their share capital is redenominated into euro. FTSE International will convert the euro price to sterling for inclusion in the indices.

42 As FTSE International has indicated that UK indices will continue to be calculated in sterling for the foreseeable future, LIFFE does not currently envisage any change to its FTSE 100 and FTSE 250 Index contracts. However, if some index components trade in euro, a second interest rate is added to the calculation of the cost-of-carry of holding the basket of shares.

43 ISDA's EMU documentation task force recommends the following:

- *AEX indices*. The Amsterdam Exchanges have decided not to adjust the formulae for their main indices when their constituent shares begin to be quoted in euro. This means that the value of the indices will fall by an amount proportional to the euro/guilder conversion rate, which will affect the value of derivatives based on them. The calculation agent will therefore have to adjust either the strike price or the market price of the index at the time of exercise.
- *'Out' currency indices*. Some 'out' currency stock indices, such as the FTSE 100, are expected eventually to include shares which are quoted in euro. ISDA will publish a clause that contract parties can use to confirm that recalculation is unnecessary.
- *Single share options*. Some shares currently quoted in 'out' currencies may come to be quoted in euro. The task force recommends that the calculation agent should be given discretion to convert at the valuation date either the strike price or the share price, so that they are in the same currency. Settlement will remain in the currency specified in the original contract. The task force intends to extend this guidance to cover swaps, and swaps and options on baskets of stock which include 'out' currency shares.

44 *Performance measurement*. The Permanent Commission on Performance Measurement of EFFAS has issued guidelines indicating that conversion to euro should not have any effect on historic performance data or accounting information. As the euro does not exist as an actual currency until 1 January 1999, it is impossible to create any valid historic information in euro, whether of portfolios, securities, indices or exchange rates. Historic performances which were comparable before EMU should remain comparable afterwards, and those which were not genuinely comparable before EMU cannot retrospectively become comparable by virtue of the creation of the euro.

45 For a number of purposes (not restricted to performance measurement) it will nevertheless be desirable to present time series which cover periods before and after 1 January 1999. The data after 1 January may be presented in euro, but a major issue is how to present the prior data. In all cases, the presentations must show the original currency of the historic data.

46 *Historic data*. It would be helpful if common terminology could be used to describe different options for historic price data, as follows.

- Historic data expressed in the original national currency should be referred to as data 'as reported'.
- Historic data converted from 'in' currencies to euro at the conversion rate should be referred to as data 'restated' or 'adjusted' in euro at the conversion rate.
- In the case of other historic data converted to euro, an element of judgement is involved. There is a wide range of potential examples, including the following:

  (a) *reference rates*: where prices of (say) two different equities are expressed in a common currency other than the euro (eg DM or FF) and the results are restated in euro at the conversion rate;

  (b) *proxy rates*: data converted using artificial substitutes for the euro (eg DM or ECU); and

  (c) *pure synthetics*: eg specially-created baskets consisting of weights (eg by GDP) of 'in' currencies.

Guidance on ESCB monetary policy operations

47 The purpose of this section is to provide for traders a summary of the operational framework for the ESCB's monetary policy operations. All credit institutions established in the euro area (including branches of overseas banks) will be eligible to participate in ESCB open market operations and to have access to ESCB overnight standing facilities. They will be required to hold minimum reserves. The ECB will take monetary policy decisions centrally, but operations will be decentralised. An institution's relationship will have to be with the NCB of the country in which it is located. So, for example, a German branch of a French bank will hold separate reserves, participate in open market operations and enter into any resulting transactions under a legal agreement with the Bundesbank.

48 *Open market operations*. Normally on Tuesdays, the ECB will hold weekly tenders for two-week repo. These operations will be used to steer market interest rates and signal the stance of monetary policy. The ECB will decide whether counterparties bid for amounts at the fixed ECB repo rate or amounts at variable rates. Normally on the first Wednesday following the 24th, the ECB will hold monthly tenders for three-month repo. These will usually be variable rate tenders because the intention is solely to provide liquidity to the banking system. In both cases, bids must be made to the local NCB by 9.30am CET. The ECB will allocate the funds centrally and announce the result at 11.15am CET. Settlement will occur the following day. Depending on the legal framework, the counterparty will either repo or pledge eligible securities to its local NCB. The ECB will publish an annual calendar setting out the exact dates of its open market operations, which may vary to avoid national holidays.

49 *Standing facilities*. Credit institutions will have access to overnight deposit and collateralised marginal lending facilities with their local NCB. The deposit facility rate will be at a spread below the repo rate and the marginal lending facility rate at a spread above it. The ECB will decide the width of this ‘corridor’, which will effectively limit volatility in overnight market rates. If a payment bank in the euro area is unable to repay intraday credit by the end of the day, this will automatically be swept into the marginal lending facility. Averaging of reserve requirements is likely to mean that an institution need rarely use the standing facilities, except perhaps at the end of the reserve maintenance period.

50 *Reserve requirements*. European law will require a euro-area credit institution to hold reserves equal to a fixed percentage of its reserve base (the ECB will decide the exact ratio between 1.5% and 2.5%). The requirement will be calculated on the basis of the previous end-month banking statistics. Institutions will then have to maintain an average end-of-day balance exceeding this amount between the 24th of the month and the 23rd of the following month. Averaging will allow an institution to decide at which point in the month it wishes to hold the required reserves. Reserves will, however, be remunerated ex post at the average of the ECB’s repo rate over the period, so there should be little scope for speculation.

51 *Eligible assets*. The ESCB will provide liquidity against a wide range of euro assets. A database intended to be available on the ECB’s website from around the end of September 1998 will list them by ISIN or other identifier. The list will comprise Tier 1 and Tier 2 assets. Any euro securities meeting harmonised criteria set by the ECB will be eligible for Tier 1. These criteria include, for example, that they are senior debt securities rated above a defined threshold, the issuer is established in the EEA and the security is deposited with an NCB or securities depository in the euro area. All Tier 1 securities will be subject to the same initial margins (1% for intraday and overnight, 2% for open market operations) and haircuts against market risk (0% for assets with a residual maturity of under one year and FRNs, 1.5% for 1-3 years, 2% for 3-7 years, 3% for over 7 years and 5% for over 7-year zero coupon bonds and strips). The Tier 1 criteria will not discriminate in favour of government as opposed to private sector securities. Additional assets proposed by individual NCBs will be eligible for Tier 2, and will be subject to higher haircuts to reflect any additional risks. All NCBs will in principle accept all assets (Tiers 1 and 2), with the local NCB acting as a custodian where assets are located in another EU Member State (although the ECB may in certain circumstances limit the cross-border use of Tier 2 assets).

52 *More information*. The ECB has just published an updated version of the *General Documentation on ESCB Monetary Policy Instruments and Procedures*, first published by the EMI in September 1997. This is the definitive guide for the ESCB’s counterparties.

B GUIDANCE FOR BACK OFFICES

(1) EURO PAYMENTS AND SETTLEMENT

53 A wide variety of alternative arrangements will be available to make euro payments. Each EU country will have at least one national euro payment system, and in some cases two (a real-time gross settlement (RTGS) system and a net end-of-day settlement system). To make euro payments cross-border, all of the present mechanisms will be available, including using independent correspondent banks, or a bank’s own local branches or subsidiaries, to access

foreign national payment systems. In addition, the 15 national EU RTGS systems (including the UK system, CHAPS euro) will be linked through TARGET. And the Euro Banking Association (EBA)'s euro system will also become available.

CHAPS euro

54 From the beginning of Stage 3, CHAPS will provide same-day RTGS payment services in both sterling and euro to its members and participants. CHAPS is an electronic transfer system for sending same-day value payments from one member settlement bank to another.

- For payments in euro, a CHAPS euro payment message is generated by a member bank which will send a S.W.I.F.T. message to the intended receiving member. Before that message is forwarded to the receiving member, part of it is sent to the Bank of England for settlement. On receipt of the settlement request, the Bank posts the debit and credit to the relevant accounts and returns a confirmation, at which point the entire message is forwarded to the receiving member. For the receiver, the payment is already settled, with funds on its account at the Bank. This eliminates all settlement risk between the members of the system and provides the receiver with true intraday finality.
- TARGET cross-border payments are made in a similar fashion, with the payment being addressed in the first instance to the Bank of England for onward transmission across TARGET.

EBA

55 The EBA views its proposed same-day value system as complementary to TARGET, providing volume clearing facilities for all 15 EU Member States through over 60 major banks operating in Europe, and initially focusing on cross-border euro business.

56 The system's features include, for risk management purposes, commercial intraday binding limits, debit caps and credit caps to control individual banks' exposures during the day before net settlement takes place. At least in the early stages of its operation, settlement will occur only centrally at the ECB. It has been agreed that the ECB will hold a cash pool (of €1 billion) on behalf of the EBA and its members. This will act as an emergency source of liquidity in the settlement process in case an EBA member should fail to make its end-of-day settlement payment into the settlement account. It would only be used in these exceptional circumstances. If the failed member could not subsequently and in time for the start of the next business day replenish the cash pool, then the surviving members would do so according to a loss-sharing formula based on the credit lines that each member had extended to the failed member.

57 Under the EBA system's Single Obligation Structure, a participating bank has, at any given time in the day, a single obligation to or claim against the community of other participating banks. This obligation or claim represents the result of the payment messages given or received by the relevant participant up to that time. Normally, settlement of the claims and obligations of the participants will take place at the end of the day, with the ECB acting as settlement agent. The EBA has, in consultation with the Bank, obtained advice that this structure is robust under English law.

Routing of euro payments

58 The conventions under which the market operates at present link the currency of a payment to a particular country. By default, the payment is paid and settled using a payment system in the country concerned. With the introduction of the euro, this linkage between currency and country is removed. A group of 31 major global clearing banks, meeting at Heathrow (the 'Heathrow Group'), has recommended best practice for clearing banks when routing euro payments for same-day value to other clearing banks with access to more than one euro payment system.

- In accordance with today's best practice, it is the responsibility of the paying clearing bank to pay direct to the branch (or subsidiary) of the clearing bank indicated in the payment message received from its account holder, where the specified branch or subsidiary is directly addressable at a euro payment system.
- However, if the branch (or subsidiary) of the receiving clearing bank is directly addressable at more than one payment system, it cannot unilaterally dictate through which system the payment is directed.
- Whilst the choice of payment system cannot be imposed by the receiving clearing bank, this does not rule out national, regional or bilateral agreements which could cause certain payments to be directed through pre-agreed payment channels.
- Where the receiving and paying clearing banks are directly addressable at any of the euro payment systems, it would be normal practice to use one of these systems.
- Nothing in the Heathrow Group's recommendations prevents a clearing bank from complying with a specific payment instruction from an account holder.
- For large payments, it would be normal practice for a paying clearing bank to inform the receiving clearing bank if it intends to use a system other than the system which would normally be used.
- Settlement instructions for foreign exchange, money market and other financial instruments and other euro payments should not specify a particular payment system to be used, except where pre-agreed contractual arrangements require transactional finality: eg RTGS systems.

Standard settlement instructions and nostro accounts

59 Many market participants have plans to take the opportunity provided by the introduction of the euro to consolidate their existing nostro accounts in each national currency into one or more euro accounts, and to change standard settlement instructions (SSIs) accordingly. The following guidance is intended to reduce the risk of dispute, settlement failure or delay arising from such a consolidation process in the money and foreign exchange markets and associated derivatives. The key to a successful transition is adequate preparation and planning to minimise the risk of problems occurring. In this context, firms have a mutual interest in adhering to the agreed timescales, which allow for orderly processing of instructions by recipients.

60 *New euro and outstanding ECU transactions*. Firms should notify by 30 September 1998 at the latest, thus providing no less than three months' notice, new SSIs for euro transactions due to settle after Stage 3 begins. Transactions in ECU entered into before Stage 3 begins but maturing

subsequently will automatically convert to euro, and should be settled in euro according to any new SSIs for euro transactions.

61 *Outstanding national currency transactions*. Transactions in the money and foreign exchange markets in national currency will remain in national currency during the transition period unless and until the parties agree bilaterally to convert to euro. Any such conversions should be irrevocable.

62 There are risks involved if all firms attempt to consolidate their payment arrangements and change SSIs for outstanding national currency transactions at the same time, and in particular over the conversion weekend or shortly afterwards, notwithstanding the most careful preparation and planning. The result could be a great number of misdirected payments, with consequences for liquidity management and firms' back offices.

63 A small number of major players intend to consolidate nostro accounts over the conversion weekend or early in 1999 for all or part of their outstanding transactions. In such cases, they should follow this course as part of a euro payment strategy which takes full account of the risks involved and should give, or will already have given, not less than three months' notice of their strategy, the timing of its implementation and associated changes to SSIs. At this late stage, other firms should not consider implementing such a strategy until some time after the conversion weekend.

64 Most firms, however, intend to delay changing SSIs for outstanding national currency transactions until after the first three to six months of 1999, when the bulk of them will have matured. Such firms should nevertheless provide not less than one month's notice of any changes to SSIs to outstanding national currency transactions. Correspondent banks are recommended to bring this notice period to the attention of any existing or new clients wishing to consolidate their payment instructions on a reduced number of correspondents or a single correspondent.

65 Whichever route is adopted, firms should retain existing nostro accounts for a period either (a) for the maturity of existing transactions in national currency where SSIs have not been changed or (b) as a contingency in the event of misdirected payments. Existing nostros may also be needed to meet customer requests where a domestic bank draft is required by the payee.

66 *Implementation of new and altered SSIs*. Market participants should make the necessary preparations to ensure that their systems can accept new SSIs and changes to existing SSIs associated with the introduction of the euro, and that they can fulfil any contractual obligations with regard to changes in accounts for payment. For example, firms may need to alter the validations in their payment generation systems to allow payments in the national currency of one country to be made to a bank directly addressable in another country. They should also ensure that they have adequate resources available to process the large volumes expected. Subject to the terms and conditions of any agreements and in accordance with current market practice, market participants should continue to accept and implement changes to SSIs in a timely way where the standard notice period has been given.

67 *Content of new SSIs and confirmations*. New SSIs will contain, as a minimum, the name of the beneficiary (including the branch if a bank), the correspondent clearing bank and branch and the account number (where appropriate); and they should conform to the Heathrow Group recommendation not normally to specify a particular payment system.

68 Changes to SSIs affecting outstanding national currency transactions should be confirmed. Where SSIs for euro transactions differ from the previous SSIs for ECU transactions, outstanding ECU transactions should be confirmed at the start of Stage 3, but not otherwise. Bilaterally agreed conversions of national currency transactions to euro should be confirmed (unless an alternative method of confirming a number of conversions simultaneously is agreed). The economic terms of OTC derivatives transactions should not be confirmed, where SSIs have been changed.

69 As far as possible, confirmation of transactions amended internally from national currency to euro for purposes of position-keeping only should be avoided, as such confirmations are likely to be unwanted and unmatched by recipients. If the generation of fresh confirmations by firms' systems cannot be avoided, counterparties should be advised in advance so that they can decide an appropriate response.

70 *Foreign exchange transactions involving two 'in' currencies*. If a forward foreign exchange transaction involves two 'in' currencies, market participants consider that the parties implementing the bilateral agreement to convert the underlying transaction should decide whether to leave the transaction in national currency, convert it to euro, or to close it out.

71 *Payment netting*. In the case of payment netting, most market participants will not net amounts in underlying transactions that are in different national currencies, even if both parties use a euro nostro. This is because few have the systems capability to perform such netting. If market participants wish to net payments, they should convert their national currency transactions to euro with the bilateral agreement of the counterparty.

ALERT

72 Thomson ESG's ALERT Working Party has issued recommendations on the use of ALERT to record and communicate new euro SSIs. There are two options for users planning to convert an existing national currency account into a euro account, while retaining the same account details.

- To change the settlement information before the conversion weekend, the user enters the account details of the converting account under the security types 'euro equities' or 'euro bonds', with the currency code as 'EUR'. The user must inform counterparties separately, through ALERT's e-mail facility, of the date at which the account converts.
- Alternatively, to change the information between midnight on 31 December and midnight on 3 January, the user simply changes the currency code for the converting account to 'EUR' over the weekend. In view of the recommendation that new SSIs be communicated by 30 September, this option is to be regarded as a fallback, and Thomson does not expect it to be widely used.

73 Users setting up a new euro account, either with the agent they already use or with a new agent, should enter the new account details under the security type ‘euro equities’ or ‘euro bonds’. They can do this in advance of the conversion weekend.

S.W.I.F.T.

74 The changes to message standards to reflect the introduction of the euro are being kept to a minimum. No new messages or fields are needed: but new code words will be introduced in order to support the communication of ‘Euro-Related Information’ (ERI). In particular, they will allow S.W.I.F.T. users to specify both euro and national currency values in messages if needed for settlement purposes. The new currency code (EUR) is available for live use for settlement messages carrying a value date on or after 1 January 1999. The national currency codes of participating national currencies, and the XEU code for the ECU, will remain on the network until the ISO, which is responsible for the currency codes, advises that they should be deleted.

CMO, CGO and CREST

75 From the start of Stage 3, CMO will offer members a euro service, parallel to and independent from the current sterling CMO service, to settle transactions in all types of instrument currently acceptable for lodgement in the CMO. Just as the sterling CMO service allows settlement only of sterling instruments against sterling consideration, so the euro CMO service will provide settlement only of euro instruments against euro consideration. The euro CMO service went live on 17 August, but will only become available to members during the conversion weekend. This will be effected within the Bank and will thus not require any direct action by members themselves before the start of business on 4 January 1999.

76 From the start of Stage 3, CGO will operate as a dual-currency system which will allow members to settle sterling or euro securities against either sterling or euro consideration. It is currently expected that the dual-currency CGO will go live on 7 December. From that time, members will be able to input and match trades involving euro consideration for settlement after 4 January 1999.

77 CREST’s existing multi-currency system is being expanded to cater for the euro. CRESTCo will introduce euro functionality on 19 October, from when members will be able to set up their euro payments infrastructure within CREST, although euro settlement will be prohibited until 4 January 1999.

National holiday calendars

78 The TARGET system will be open every weekday except Christmas Day and New Year’s Day when they fall on a weekday. But there are approximately 50 days on which there is a national holiday in at least one participating Member State. Every national RTGS system will be open on all TARGET business days. The ICSDs will be open on all these days. The ECB may publish a calendar of national CSD opening days.

79 In the UK, CHAPS euro will open, and CREST intends to open for euro settlement, on all TARGET business days. It is proposed that both the euro CMO service and CGO will open on UK Bank Holidays (see Chapter 4).

(2) THE CONVERSION WEEKEND

Market testing for the conversion weekend

80 The Securities Industry EMU Group, which consists of major investment banks and custodians, recommends that market firms should have completed at least two full dress rehearsals of their systems, procedures and processes before the conversion weekend. The objectives of a dress rehearsal should be to demonstrate that: all preparatory work for the conversion weekend has been completed; all activities required for a successful conversion can be achieved in the available timeframe; adequate capacity and resources have been allocated; and effective contingency plans are in place in the event of systems failure or processing delays.

81 The Global Custodians' EMU Forum recommends that global custodians should use internal testing to ensure that all their systems work correctly together, that they can withstand conversion weekend volumes, and that they can complete conversion processes within the required timescales. Global custodians and fund managers should convert a test portfolio and compare results: a standard portfolio produced jointly by IFMA and the Global Custodians' Forum is available on IFMA's website. A revised version of the same portfolio including data on book costs as well as nominal amounts and market values, and suggested conversion results for both versions, will be available shortly. Global custodians should test with sub-custodians to ensure that they have a consistent understanding of conversion methodology, and that their instruction and confirmation mechanisms over the conversion weekend are compatible. Feeds from information providers should also be tested. There is no need to test delivery mechanisms, as custodians will deliver the results of redenomination over the conversion weekend in the usual way (eg S.W.I.F.T. messages).

82 To help market participants test for the conversion weekend, Euroclear has made its 'sEMUlator™' publicly available on its website free of charge. This allows market participants to test redenomination algorithms to ensure their systems generate consistent results. A detailed description is in the EMU section of the Euroclear website. Other institutions have made similar information available. For example, Paribas' system has specifically been prepared to support the IFMA model portfolio.

Payment and securities settlement systems, and exchanges, on 31 December 1998

83 The current state of play on whether payment and securities settlement systems, and exchanges, in each Member State will be open or closed on 31 December 1998, as understood by market participants, is as follows (see Table 2).

TABLE 2: PAYMENT AND SECURITIES SETTLEMENT SYSTEMS, AND EXCHANGES, ON 31 DECEMBER 1998

	Payment systems	Settlement systems	Exchanges
Austria	U	U	C
Belgium	O	O	C
Denmark	AM	AM	C
Finland	AM	AM	C
France	O	O	C
Germany[(a)]	O[(b)]	C	C
Greece	O	O	O
Ireland	U	O[(c)]	C
Italy	O	O	C
Luxembourg	O	O	C
Netherlands	AM[(d)]	O[(e)]	C
Portugal	O	O	C
Spain	O	O	C[(f)]
Sweden	C	C	C
UK	O	O	C[(g)]
ICSDs		O	

Notes: O = open on 31 December. C = closed on 31 December. U = uncertain. AM = open in the morning only. (a) National holiday on 31 December. (b) EAF will be closed. EIL-ZV will be open, but with a shorter window than on normal working days. (c) CREST. (d) TOP. (e) NECIGEF will be open for settlement. AEX Options will be open, but AEX Securities will be closed. (f) The stock exchange will be closed. MEFF RV will be closed for trading, but MEFF RF will be open until 1.00pm. (g) The LSE will not be open for new trades on 31 December. LIFFE will be closed, but the LME will be open.
Supplementary notes on the USA: The NYSE currently plans to be open for a full trading day on 31 December; CME a full day for equities and a half day for financials; FINEX closes at 1.00pm; MIDAM is open; PHLX is open for half a day.

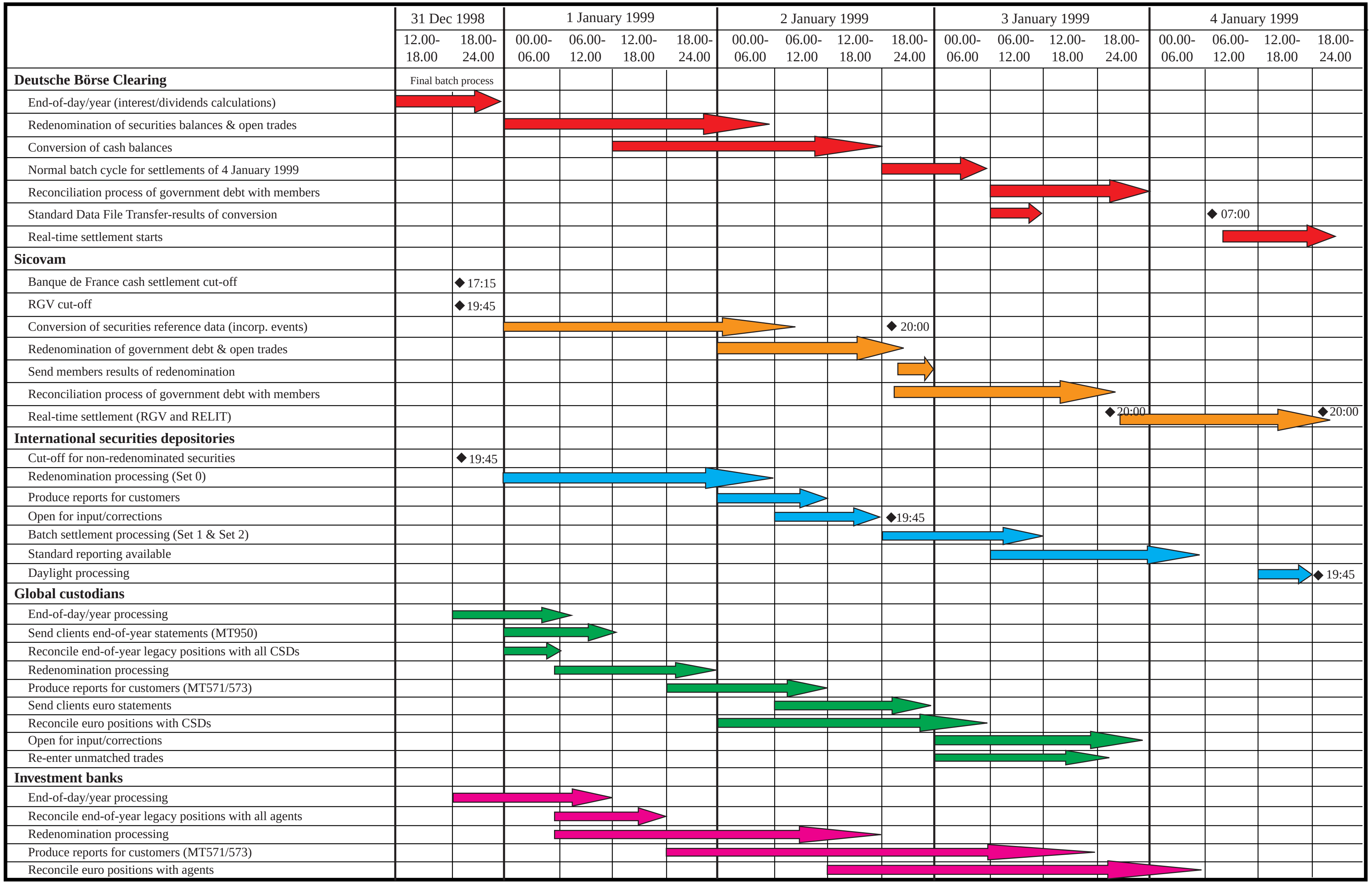
Timetable during the conversion weekend

84 The Securities Industry EMU Group’s recommended timetable for the conversion weekend is set out in Chart A, and the timetable for one major market firm is set out in Chart B.

85 The Securities Industry EMU Group is proposing that CSDs, ICSDs and agent banks should provide regular updates on their progress during the course of the conversion weekend. It recommends that the expected delivery date and time of key information is posted in a common format on to each institution’s external website. The Group will work with these institutions to agree the exact type and format of the information to be posted. Key information is likely to include estimated times for: the availability of closing securities positions at 31 December; closing cash positions at 31 December; failed trades at 31 December; open trades at 31 December; converted pending instructions; cash balances at 4 January; securities positions at 4 January; and the beginning and end of the period in which updated instructions can be sent. It is proposed that the information is updated at intervals of three hours, or more frequently. If this proposal is widely adopted, market participants would be able to see up-to-the-minute information about institutions’ positions in a common layout, without needing to be in regular telephone contact. The Bank of England is prepared to provide a website from which other relevant websites could be directly addressed, if there is market demand for such a facility.

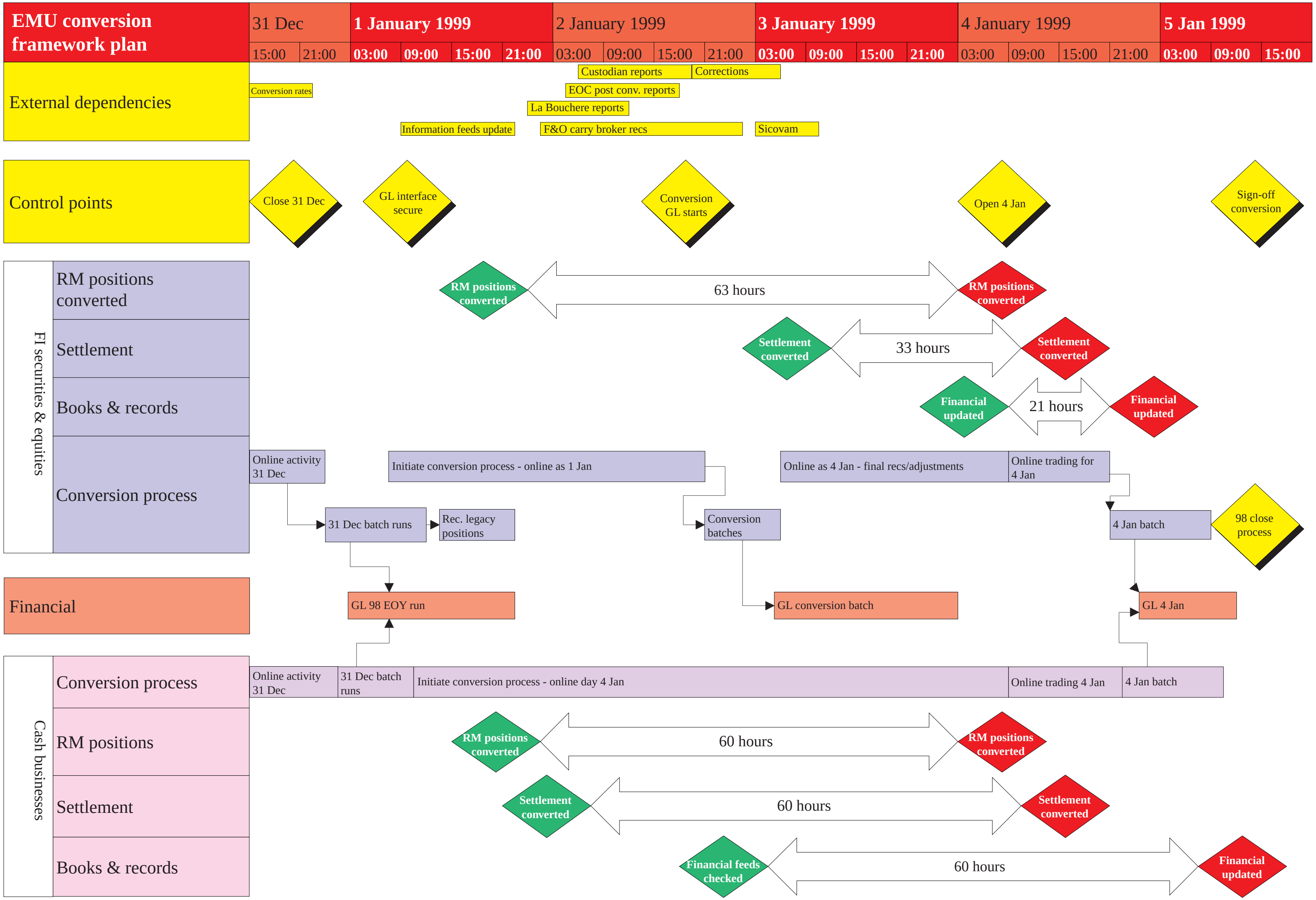
TIMETABLE FOR THE CONVERSION WEEKEND

CHART A



TIMETABLE FOR A MAJOR MARKET FIRM OVER THE CONVERSION WEEKEND

CHART B



Source: JP Morgan

Contingency planning: the authorities' role over the conversion weekend

86 For many firms, the nature and scale of their work over the conversion weekend is unprecedented, and interdependencies between firms are key. Problems can be mitigated by careful preparations, and extensive testing and trialling, but there is inevitably some residual risk that the conversion weekend may not run smoothly to plan everywhere. Before the markets open, there will be little spare time in which to deal with any problems that might emerge. Problems could extend from the back office to front-office operations, including the treasury function, and if severe could lead firms to scale back, perhaps considerably, their trading activity once markets reopen on 4 January.

87 There is also a risk that the conversion weekend might not run to plan for a major component of Europe's euro payments and securities settlements infrastructure. A securities depository, or a local or global custodian, could for example encounter difficulties in redenominating securities over the weekend. This could leave it unable to settle trades struck before the weekend but due to settle afterwards, or possibly unable to settle new trades efficiently. There can also be no absolute assurance that all the euro payment systems will function as planned in a live environment.

88 If an individual market firm were unable to complete its conversion weekend tasks satisfactorily, it would in the first instance be a matter for its national regulator, which might take action after the event. However, other authorities, including central banks, might need to be involved if the problem were to interfere with payment and settlement processing, for example if the firm was a clearing bank or a major custodian; or if many firms were affected. Moreover, the conversion weekend affects firms and payment and settlement systems across the whole of Europe, and serious problems in one market or system could affect firms elsewhere. So different authorities across all Members States - and possibly even outside the EU - may need to communicate with each other and to co-ordinate any actions.

89 It would therefore be helpful for the various central banks and regulators in Europe, and to a lesser extent elsewhere, to consider under what circumstances they would expect firms to contact them over the weekend, and precisely how they should do so. They will also need to decide how, and how closely, they wish to monitor progress over the weekend. This could clearly have staffing implications. It will also be important for the authorities to be able to communicate with each other quickly and efficiently over the weekend, so it may be sensible to establish a prior contact list of names available during the weekend in each central bank and regulatory authority.

90 The Bank and the FSA have begun to address these issues as they relate to the UK. They have also been discussing with the ECB to what extent the issues should be considered collectively by authorities around Europe, and the best forum in which to do so.

Conversion of securities transactions and balances over the conversion weekend

91 Where securities are to be redenominated over the conversion weekend, the process will involve simultaneous conversion of securities balances at the CSDs, the ICSDs, custodians and other market intermediaries. Owing to the limited time available, all those involved in the process should convert their own records of securities to be redenominated as soon as conversion

rates and closing balances on 31 December become available, and reconcile the resulting balances with those supplied by CSDs, ICSDs and custodians later in the weekend.

92 Members of national CSDs need to be aware that, in addition to their securities balances being redenominated into euro, their cash accounts and the proceeds of pending trades will be converted automatically from national currency to euro over the conversion weekend. But cash accounts at ICSDs will not all be converted. ICSDs will only convert the proceeds of trades where the underlying issue is being redenominated, or trades with a counterparty in a national market converting in a 'big bang'. In other words, ICSDs will convert the proceeds of trades in accordance with the following rules:

- Cross-border instructions involving an ICSD customer and a counterparty in a national market will follow the rules of the national market concerned. If the national market is proposing to deal and settle only in euro, the cash leg of instructions will be converted into euro regardless of whether the issue is redenominated.
- In the case of pending instructions within the ICSDs for securities being redenominated: if the denomination of the nominal amount is the same as the denomination of the cash leg, they will both be converted into euro; if the denomination of the nominal amount and cash leg are different, only the nominal amount will be converted.

93 The Securities Industry EMU Group recommends that market firms should adopt the following procedures for the conversion of securities transactions and balances over the conversion weekend.

- All firms should mirror the approach to conversion taken by the ICSDs for trades executed and received by the ICSDs prior to their cut-off time (7.45pm CET) on Thursday, 31 December.
- For trades not received prior to the cut-off time on 31 December, firms should take the following action: (a) all redenominated securities should be instructed in euro; (b) non-redenominated securities that are due to settle in the national market should have their cash consideration instructed in euro; (c) non-redenominated securities that are due to settle in the ICSDs should be instructed with cash consideration in national currency.
- In the event that a firm wishes to settle all open 'in' currency trades in euro at the ICSDs, this will require the firm bilaterally to agree with each of its counterparties to cancel trades in non-redenominated securities which have been instructed in national currency and to reinstruct each trade to settle in euro.
- Firms should not reconfirm, or renotify, to their counterparties open trades that have been converted as part of their conversion process. However, at the request of customers, firms may wish to supply informal reconfirmation or renotification to their clients as part of their customer services.
- The open trade conversion process operated by custodians, regulators, Electronic Trading Confirmation (ETC) operators, and other service providers will carry forward any external reference identifier transmitted with the original trade. Market participants' open trade conversion processes should, therefore, ensure that the original external trade reference identifier is also carried forward to the new converted trade.

- The process of converting securities trades should not change any of the original dates contracted (ie trade and value date).
- Where an issuer decides to reconvention a bond during a coupon period, the market practice should be to adopt a watershed date for changing from the old to the new conventions for interest accrual. Trades executed before the watershed date should use the old conventions to determine the accrued interest, even if the trades settle after the watershed date. Trades executed on or after the watershed date should use the new conventions.

94 Euroclear now provides a detailed list of Euroclear-eligible debt securities to be redenominated. The list will be updated on a regular basis. It is accessible on the Euroclear website. Access to the list is not restricted to Euroclear participants. Cedel Bank also provides a detailed list of Cedel-eligible debt securities to be redenominated on its website. *Inter alia*, Paribas also provides a detailed list of securities to be redenominated on its website.

Standard practice for global custodians over the conversion weekend

95 The Global Custodians' EMU Forum has made the following recommendations for best practice over the conversion weekend.

- Global custodians should accept settlement instructions from clients up to normal cut-off times on 30 December 1998.
- In the case of markets that are open on 31 December, custodians will accept instructions on that day. Some custodians will also accept instructions on 31 December for markets which are closed on that day.
- Instructions submitted on 30 and 31 December should be for settlement with the market in national currency regardless of settlement date.
- Global custodians should make statements of positions in affected markets on 31 December available to clients.
- Global custodians should reconcile these statements with their clients and sub-custodians and document any differences. Areas to be so reconciled include: settled securities and cash positions; open transactions including fails and repos; and other open transactions.
- The conversion process should commence as soon as practicable after the reconciliation process is complete, with the aim of completion by mid-day on 2 January 1999.
- Cash accounts should be redenominated to euro or new accounts established in euro and national currency balances should be converted to euro.
- Securities should be redenominated in accordance with the practices laid down by the governing country of issue and national numbering agency.
- In order to facilitate securities processing across market participants, that part of any holding less than one euro of nominal value should be disposed of at the point of redenomination or as soon as practicable thereafter.

- Open trades, including fails and repos, should be converted to reflect settlement in euro without the need for renotification, rematching, or reinstruction to the market.
- Once all conversion and redenomination activity is complete, global custodians should make statements of positions, in affected markets, available to clients.
- Global custodians should reconcile these statements with their clients and sub-custodians and document any differences. Areas to be so reconciled include: settled securities and cash positions; open transactions including fails and repos; and other open transactions. Any differences should equate to those documented in the reconciliation process conducted prior to conversion and redenomination.
- Global custodians should complete the post-conversion reconciliation with their clients and with the market (agents, CSDs, ICSDs as appropriate) by the close of 3 January 1999.
- All subsequent settlement instructions to global custodians should be for settlement with the market in euro.
- These recommendations should apply to off-exchange transactions as well as exchange-traded transactions.

Fund managers' relations with brokers and custodians over the conversion weekend

96 IFMA recommends that best practice for fund managers' relations with *brokers* over the conversion weekend should be as follows.

- SSIs to be used for euro settlement after 1 January 1999 should be circulated to, and received from, counterparties and brokers not later than 30 September 1998. These include new or amended bank and custodian account details.
- No orders for securities in participating national currencies should be left open on the market over the conversion weekend. Fund managers may choose to re-instate orders in euro on 4 January 1999.
- For securities in participating national currencies, work-in-progress trades (ie where confirmation, affirmation or settlement has not yet taken place) should be kept to a minimum at the close of business on 31 December. Fund managers and brokers should ensure that settlement instructions for all trades executed up to and including 31 December are issued to custodians or agents by close of business on that day. All failed settlements for such trades should also be resolved by the same time.
- The general best practice of confirming and affirming trades by close of business the day after trade date (T+1) should be adopted by all fund managers and brokers until the end of November. From the beginning of December, all fund managers and brokers should confirm and affirm trades by close of business on trade date (T+0).
- To achieve this, fund managers should establish internal processes and deadlines to ensure that 'deal tickets' are completed and despatched to the back office with minimal delay after deal execution. They should also ensure that they have the appropriate staffing levels and systems availability (eg for conversion weekend working).
- Any trades not confirmed prior to close of business on 31 December, and any cancellation and corrections of trades from 1998, should be confirmed and affirmed in

national currency and with the original ISIN and SEDOL code. This will require manual conversion procedures.

- No reconfirmation or re-instruction of existing good trades will be issued during or following the conversion weekend.
- Trades executed in 1998 and confirmed and instructed in time will be converted independently by fund managers, brokers and custodians.
- Interest claims relating to trades executed in 1998 will be calculated using national currency balances and interest rates, with the total claim converted to euro at the conversion rate. Interest claims relating to trades executed after 1 January 1999 will be calculated in euro. Settlement of all interest claims after 1 January will be in euro, including for national currency transactions. Settlement of interest claims will be an operational matter handled by custodians, brokers and fund managers without involvement of the client.

97 IFMA has also made recommendations for fund managers' relations with *custodians* over the conversion weekend. These are consistent with the recommendations for relations with brokers, but also include the following additional points.

- Cancellations of trades from 1998 in all securities will be instructed to custodians with both nominal and consideration in national currency. Instruction of corrected trades arising from cancellations should follow the approach to be taken for trades instructed after the custodian's cut-off: in the case of non-redenominating securities, the nominal should be expressed in national currency and the consideration should be expressed in euro; in the case of redenominating securities, both nominal and consideration should be expressed in euro.
- Settlement of all national currency transactions from 1 January 1999 will occur in euro. This will require a formal agreement at portfolio level similar to a standing instruction, where market practice permits.
- To facilitate settlement and cash management, each portfolio should have a single euro cash account replacing all national currency accounts from 1 January 1999.

98 *Electronic trade confirmation*. Thomson ESG's user group has issued the following two key recommendations for the use of OASYS Global over the conversion weekend:

- ETC clients should ensure that all trades executed up to close of business on 31 December should be confirmed and affirmed by close of business that day.
- Confirmations and affirmations which are nevertheless outstanding at close of business on 31 December should be made in national currency and with the original SEDOL or ISIN. The same is the case for any amendments, rejections or cancellations of trades made on or before 31 December.

99 On TRAX, any transactions unconfirmed at the close of business on 31 December may be confirmed or modified in national currency up to mid-day on 2 January. After then, any changes have to be made in euro.

Euro cent amounts, fractions and unmarketable units

100 IFMA has published best practice recommendations on the treatment of euro cent amounts, fractions and unmarketable units. Their essential principles are as follows.

- Where assets are held in an omnibus or pooled account at the custodian, the redenominated securities balances at the custodian may be less than the sum of the individual clients' redenominated holdings on the books of the fund manager. In this case, it is the fund manager's responsibility to make up the difference. Similarly, where redenomination involves cash payouts (eg for French government debt), it is for the fund manager to make up differences between the total amount of cash paid into the omnibus account, and the sum of the cash payouts to clients.
- Where redenomination results in the nominal amount of a security being less than one euro (eg for German government debt), IFMA recommends that the custodian should take no further action to 'tidy up' the position by disposing of the fractional amounts unless instructed to do so.
- Where redenomination causes unmarketable or odd lots (ie amounts of security nominal which are too small to be traded normally), it is for the fund manager to decide when to initiate any sale or repackaging of these amounts.

101 Global custodians agree that fractional amounts of security nominal should be disposed of as soon as practicably possible. A number of major global custodians are proposing to act in accordance with IFMA's recommendations for all markets. Thus they intend to take no further action to dispose of fractions until instructed to do so by the fund manager. But others have decided to dispose of fractions at the point of redenomination after consultation with their clients and fund managers. There are a number of different methods by which fractions may be disposed of. (They were set out in the June *Practical Issues.*) Some fund managers may use a number of custodians who intend to dispose of fractions in different ways. This would mean applying different approaches to the same security. It is important that the confusion and practical difficulties this could potentially cause should be minimised. Fund managers and custodians should therefore agree clearly, and as early as possible, precisely how they will treat fractions in each market where they could arise.

Conversion of repos

102 The conversion of pending repo activity from national currency to euro is more complex for many firms' internal systems than the conversion of pending cash trades. This is because any change to the repo trade details has to be replicated back to the original transaction. Repos are often repeatedly rolled over. The aim should be to avoid having to unwind a series of linked repo transactions, or to reprice and reconfirm every pending repo trade, on 4 January 1999. Proposed solutions should be *internal,* in the sense that they are designed to create updated trade and accounting records on the computer systems of market participants, while any automated confirmations and clearing instructions arising from this activity are suppressed.

103 The Broker Group/ISMA Repo Sub-Committee recommends three options which meet these requirements. Market firms should choose whichever option is most appropriate for their own volume of business and internal computer systems.

- *Option 1*. The repo is not changed over the conversion weekend. Two further outright trades are booked over the conversion weekend for the same value as the maturity date of the repo. One outright trade exactly offsets the repo trade in national currency. The other reflects the actual settlement in euro. This option would suit a market participant with a relatively inflexible repo booking system, and low repo volumes. It assumes the most manual intervention on the maturity date.
- *Option 2*. The repo trade in national currency is 'closed out' over the conversion weekend. A new repo trade is booked, using the net proceeds from the closed-out repo, but converted to euro. The maturity date of the new repo is the same as for the original repo. The new repo proceeds on the maturity date are pre-figured to agree with the original proceeds, converted from national currency to euro. From the conversion weekend onwards, the new repo transaction is recorded on internal book-keeping systems as being denominated in euro. This option would suit a market participant with more automated computer systems and potentially with a higher volume of pending trades. It assumes a flexible repo booking system which allows cash proceeds at maturity to be overridden and repo interest rates to be imputed.
- *Option 3*. The repo trade is left in national currency until the maturity date. Bonds redenominated over the conversion weekend are processed as collateral substitution. The repo transaction is therefore accurately reflected on internal book-keeping systems as being denominated in euro from the conversion weekend onwards. Since an internal currency conversion would be required on the maturity date, this option has a significant manual component. It would suit a market participant possessing internal systems which efficiently process collateral substitutions, but without the additional functionality to override standard repo parameters (as required in Option 2).

104 Before conversion, the Broker Group/ISMA Repo Sub-Committee recommends that investment banks should:

- Inform clients in advance that all outstanding trades in the euro area will be converted to their euro equivalent and that the maturity leg of outstanding financing trades will settle in euro.
- Avoid unnecessary settlement on 4 January 1999.
- If possible, convert 'open-ended' trades to term transactions to allow a cleaner conversion process.
- Ensure that settlement instructions for maturity legs are sent and matched before the conversion weekend; that all outstanding margin calls and fails are cleaned up; and that no confirmations are sent for conversion.

105 The Broker Group makes the following additional recommendations relating to the conversion of repos:

- Whichever method market participants use to convert trades, the original trade date should not be changed. This is particularly important for buy/sell back trades.
- Cash paid at maturity should be the euro equivalent of the national currency amount agreed at the inception of the trade. In the event of reconventioning, there should be no impact on the final cash amount of trades straddling the reconventioning date.

- In the case of trades in redenominated securities initiated prior to 1 January 1999 but needing amendment after mid-day on 2 January, TRAX will require such amendments to be made in euro and not in national currency. Trades in securities that are not redenominated should still be amended in national currency.
- Tri-party trades in ECU will be converted to euro. Existing tri-party deals in national currency are expected to roll off in national currency. The ICSDs will offer conversion facilities to enable conversion of national currency to euro at the maturity of a trade, on instruction by the counterparty. Because of their relatively short maturity, most tri-party deals are likely to be denominated in euro within a few weeks of the beginning of 1999.

OTC derivatives

106 ISDA has published back-office operations guidance on the euro for OTC derivatives. This covers interest rate, bond, equity and foreign exchange products and is available on ISDA's website. ISDA's guidelines attempt to minimise the burden over the conversion weekend and encourage minimal changes to existing instruments. However, some changes over the conversion weekend will be required. In particular, existing instruments are likely to require changes to price sources (see Table 2).

Backlog after the conversion weekend

107 There is a significant risk of a backlog of conversion-related problems in January 1999. Some market participants also fear an increase in fails because of mistakes in the conversion process. Firms should make sure that they have sufficient staff available in the first few weeks and months of 1999 to deal with a possible upsurge in conversion-related problems. Most market participants do not favour a temporary increase in tolerances, which might create confusion and would not help in the case of significant mismatches.

(3) MARKET DOCUMENTATION

Standard legal agreements in the London market

108 A standardised approach to documentation of a broad range of financial transactions has been achieved through the widespread use of the legal agreements published by ISMA and the PSA (now the Bond Market Association), ISDA and the BBA. Each of the agreements can be used for a particular product area: the PSA/ISMA Global Master Repurchase Agreement (GMRA) for repurchase transactions; the 1992 ISDA Master Agreement for interest rate and currency swaps and other derivative transactions; and the International Foreign Exchange Master Agreement (IFEMA), the International Currency Options Master Agreement (ICOM) and the Foreign Exchange and Options Master Agreement (FEOMA), as provided by the BBA for foreign exchange and currency option transactions.

109 The widespread use of standardised London documentation (both within the UK, and on a cross-border basis in other European and non-European markets) has many benefits for the counterparties concerned. The documentation process is more straightforward, thus lessening the need for protracted negotiation, and thereby reducing documentation costs. In addition, standardised agreements promote efficiencies in dealing with provisions which are necessary or

desirable from a technical and operations perspective (taking into account market practices and issues relevant to the transactions concerned) and from a legal perspective (where failure to adopt certain techniques and mechanisms might result in the enforceability of the transactions being adversely affected). Furthermore, the adoption of a single governing law (in this case, English) for the agreements, together with the continual and on-going efforts of the market associations in obtaining legal opinions (eg in over 30 different jurisdictions for PSA/ISMA and ISDA), has promoted legal certainty as to their effect and enforceability on a cross-border basis.

110 All the market associations have issued, or are in the course of preparing, suggested amendments or additions to their standard documentation (and associated guidance) to take account of the introduction of the euro. Although the precise content varies, there is a broad similarity as to the areas which may be covered by counterparties: eg

- confirmation of continuity of contract;
- confirmation of applicable successor price sources;
- clarification of payment and netting provisions;
- new and amended definitions for such terms as the euro, ECU, settlement days and business days; and
- clarification of calculation methodology or necessary adjustments, taking into account the nature of the underlying asset and other factors such as redenomination.

111 The method by which the relevant amendments or additions are made varies between the use of a *bilateral mechanism* (as for the GMRA), where the two counterparties to an underlying Master Agreement agree to adopt the provisions of a new annex to that agreement, or a *multilateral mechanism* (as for the ISDA Master Agreement and the other agreements referred to above), where a counterparty adheres, in whole or in part, to a protocol which has the effect of amending all Master Agreements or outstanding transactions that it has entered into with all other counterparties adhering to the protocol in the same terms.

112 The European Banking Federation (EBF) is currently discussing an initiative to sponsor a European Master Agreement (ERA) for repos and other transactions (such as derivatives, securities lending, swaps and foreign exchange). It is not yet clear how the ERA would be structured, or the extent of market demand for the initiative. Any possible conflicts and inconsistencies between the ERA's technical and operational aspects and those adopted in other international master agreements would need to be resolved, to avoid fragmenting the benefits of standardisation and harmonisation that all of the relevant agreements are designed to achieve. Since it appears that counterparties would be free to choose the governing law of the ERA, an important aspect would be the need to ensure enforceability and legal certainty in all relevant jurisdictions (within or outside the euro area).

Syndicated loan documentation

113 The London Loan Syndications Information Group, which consists of representatives of major banks active in the loan syndications market in London, suggests the following guidelines for the market. (A fuller exposition by Slaughter & May is available on the Bank's website.)

- As regards *legacy loan agreements* (ie loan agreements entered into prior to 1 January 1999 but continuing after that date under which drawings have been, or could be, made in ECU or participating national currencies), parties need to consider the impact of EMU on the existing terms of each agreement on a case-by-case basis, in particular the impact on the conventions applicable for calculating interest and relevant concepts such as what constitutes a 'business day'. Where parties wish to adopt a different approach to that prescribed in an agreement, they would need to agree with their counterparties amendments to the relevant documentation.
- Many existing definitions of 'business day' refer to a day on which banks in London are 'generally open for business' (or similar phraseology). The Group anticipates that, as from 1 January 1999, the test set by this type of wording will *not* be met in London in practice on a day which is a TARGET day but is also a Bank Holiday in England. Accordingly, it expects agreements using this type of definition to continue to operate on the basis of 'London', rather than TARGET, days, at least for the foreseeable future. In this circumstance, parties may wish to consider the impact of euro screen rates being quoted, and the euro interbank deposit market operating, on TARGET days. Other styles of 'business day' definition will need to be assessed on a case-by-case basis.
- The Group expects most new advances in euro or national currency under legacy agreements to adopt the day-count of actual/360 (including for Belgian francs, Irish punt and Portuguese escudo). This will either derive from the loan agreement's terms (which, for example, may select the day-count by reference to market practice) or from the parties agreeing this. However there may be a residual, diminishing group of loans in BEF, I£ or PTE under legacy agreements for which a day-count of actual/365 has to be retained. The Group requests price sponsors providing rates for BEF, I£ or PTE from 1 January 1999 (or comparable euro rates) to ensure that these are published on both an actual/360 and an actual/365 basis, to facilitate operation of legacy agreements on either basis. It is understood that, where applicable, this will be done for euro LIBOR and EURIBOR.
- Where, under a legacy agreement, payments are required to be made to an account in 'the principal financial centre' of the relevant currency of the drawing and that currency, after 1 January 1999, will be the euro, the Group expects that an account in the principal financial centre of any Member State may be nominated.
- As regards *new loan agreements*, the Group recommends that two separate definitions of business day should be used in documentation: the first for the purpose of interest rate setting (a 'Quotation Date'); the second for all other purposes (including payments, drawings and delivery of notices). The Quotation Date, when setting rates in euro, should be based on TARGET days. The business day definition for all other purposes in respect of borrowings in euro may continue to be based on 'London' days or (where the parties wish this) on TARGET days. Some agreements may, as now, exclude non-working days in other relevant jurisdictions, on a deal-by-deal basis.
- New loan agreements will adopt the day-count of actual/360 for borrowings in euro or national currency in Stage 3.

C GUIDANCE ON LAW, ACCOUNTING, TAX AND REGULATION

The euro Regulations

114 The Regulation under Article 235 of the Treaty (EC/1103/97) is now in force in all Member States, including the UK. In summary, this Regulation ensures that:

- The official ECU will convert to the euro on 1 January 1999 at the rate of one ECU to one euro. It is presumed that, where the private ECU is used in a contract, the parties intended to link it to the official ECU, with the result that it is also convertible to the euro at the same rate. This presumption will apply unless the parties intended otherwise.
- Continuity and freedom of contract are safeguarded. Contracts denominated in the national currency of participating Member States will remain unchanged as a result of the introduction of the euro, unless otherwise agreed by the parties.
- The conversion rates will have six significant figures and may not be rounded or truncated. But monetary amounts to be paid or accounted for will ordinarily be rounded to two decimal places, with amounts ending in five being rounded up.

115 The Regulation under Article 1091(4) (EC/974/98) will come into force on 1 January 1999. In summary, it provides that:

- The euro will be substituted for the currency of each participating Member State at the conversion rate.
- The euro may be freely used where the parties so choose for non-cash transactions during the transition period from 1 January 1999 to 31 December 2001 and for both cash and non-cash transactions from 1 January 2002.
- Contracts denominated in the national currency of a participating Member State will continue to be performed in that national currency during the transition period, unless otherwise agreed by the parties or unless amounts in that currency are payable inside the same Member State by crediting an account. In the latter case, payments may be made in the euro or the national currency of the relevant Member State. The bank or other account provider is required to credit the payment to the account in the denomination in which the account is kept, using the conversion rate.
- Private sector issuers of bonds in the national currency of a participating Member State may redenominate their bonds to the euro (after that Member State has redenominated some or all of its sovereign debt issued in its national currency under its own national law), without a bondholder meeting, unless redenomination is excluded by contract or unless it would alter any other term of the debt.
- At the end of the transition period (on 31 December 2001), contracts will be read as if all references to participating national currency units were to euro units at the conversion rates. The rounding rule in the Article 235 Regulation will apply where a monetary amount is to be paid or accounted for after such conversion.
- When euro banknotes and coin are issued on 1 January 2002, they will have legal tender status throughout the euro area. Banknotes and coin in participating national currencies will subsequently be withdrawn and cease to be legal tender by

30 June 2002 at the latest. This final period may be shortened by individual participating Member States, if they so choose.

116 The Article 1091(4) Regulation is not expected to be directly applicable to the UK because of its opted-out status. However, certain provisions should be recognised by English law under the principles of private international law.

Conversion and triangulation

117 The full conversion rates must be used for conversions in either direction between the euro and its national denominations. Inverse rates derived from the conversion rates must not be used. When converting from the euro to a national currency unit, it is necessary to multiply the euro amount by the conversion factor. When converting from a national currency unit to the euro, it is necessary to divide the national currency unit amount by the conversion factor. Following a conversion, any monetary amounts to be paid or accounted for should be rounded up or down, generally to the nearest sub-unit, with results that are exactly half-way rounded up.

118 *Triangulation*. Conversion between one national currency unit and another must be done via the euro. This procedure has become known as 'triangulation'. It is permissible, but not compulsory, to round the intermediate euro amount to no fewer than three decimal places. It is not necessary to record in any way the intermediate amount.

119 Different results may be derived from the triangulation process, depending on whether this intermediate euro amount is rounded (and, if so, to how many decimal places). If two different parties derive different results after triangulation, then they may wish to check whether they have rounded the intermediate euro amount and, if they have, whether they have done so to the same number of decimal places.

120 No alternative method of calculation may be adopted unless it produces the same results. In practice, it is difficult to prove rigorously that alternative methods of calculation do produce the same results as the triangulation algorithm. The onus of proof, and the legal risk, rests with the person using an alternative method.

121 *Conversion to and from third currencies*. There are two equally valid methods for converting between the national denominations of the euro (eg DM) and other currencies (eg £). But they do not necessarily produce the same result when applied to the same initial amount. If parties derive different results, they may therefore wish to check which method each has adopted.

- *Conversion via the euro*. This method has two steps. First, convert DM into euro at the conversion rate, following the conversion rules in the Article 235 Regulation (though there is no need to round the euro amount in accordance with the Article 235 Regulation, as it is not 'a sum to be paid or accounted for'). Second, convert the intermediate euro amount into sterling (normally to the nearest penny). In reverse, the DM would be rounded to the nearest pfennig, following the Article 235 Regulation.
- *Conversion using a cross rate*. This method has one step. The DM/£ cross rate is used to convert directly between DM and £, without going through the euro. The conversion and rounding rules of the Article 235 Regulation do not apply to this method, whether converting from DM to £ or *vice versa*.

122 It is important to note that some governments may introduce (under national law) additional rules governing the introduction of the euro, which could have implications for the conversion and rounding requirements in those jurisdictions. The UK Government, however, has not introduced any such additional rules for application in the UK.

Accounting

123 Many UK companies will need to adapt their accounting systems to record receipts and payments in euro. Some companies may also wish to adopt the euro as their base accounting currency, especially if a large part of their sales is to 'in' Member States. They would then probably also wish to file accounts in euro. There should be no difficulty about this, since Companies House already accepts accounts in currencies other than sterling. The timing of any switch would be for the company itself to decide.

124 On the treatment of foreign exchange gains and losses, the current UK approach under SSAP 20 will not change: gains or losses will arise up to the date at which the 'in' currencies become fixed, and they will be measured and reported in the normal way. Under UK accounting principles, exchange gains and losses are almost always recognised as they occur, whether or not they are realised, and immediately recorded in the profit and loss account.

125 The Accounting Standards Board has ratified its guidance on accounting issues by its Urgent Issues Task Force. This can be summarised as follows.

- The costs of making the necessary modifications to assets to deal with the euro should be written off to the profit and loss account except in those cases where (a) an entity already has an accounting policy to capitalise assets of the relevant type and (b) the expenditure clearly results in an enhancement of an asset beyond that originally assessed and not in the mere maintenance of its service potential. Other costs associated with the introduction of the euro should also be written off to the profit and loss account.
- Expenditure incurred in the year and commitments at the balance-sheet date in respect of preparing for the changeover to the euro should be disclosed in the financial statements. Other information and discussion on preparing for the changeover to the euro may be more appropriately located in any operating and financial review statement published by the entity.
- Cumulative foreign exchange translation differences recognised in the statement of total recognised gains and losses in accordance with SSAP 20 should remain in reserves after the introduction of the euro and should not be reported in the profit and loss account.
- Where gains and losses on financial instruments used as an anticipatory hedge are currently deferred and matched with the related income or expense in a future period, the introduction of the euro should not alter this deferral and matching treatment.

126 It is important to recognise that there may be an exchange rate effect on accounting periods prior to 1 January 1999, and that relationships between figures, although they may be stated in euro for the convenience of readers (a 'convenience translation'), will vary depending on whether figures in the previous reporting currency were themselves the result of translation at the time.

The UITF has issued draft guidance on convenience translation, which can be summarised as follows.

- Where an entity presents a convenience translation into euro of its financial statements, including comparative amounts for accounting periods ending before the introduction of the euro, the original reporting currency amounts should be translated at that currency's fixed euro conversion rate. It would be helpful if the notes to the financial statements explained that the trends over the years are exactly the same as if the financial statements for all periods had been expressed in the previous reporting currency. The UITF recommends that entities should disclose the previous reporting currency applicable when information on periods before 1 January 1999 is presented in euro.
- If a company with a September 1998 year-end includes assets and liabilities in 'in' currencies, it would not be appropriate to record the balances at any rate other than the end-September closing rate.
- If the functional currency of a subsidiary changes or becomes the same as the functional currency of its parent because exchange rates become fixed, it is not appropriate to restate prior year figures as if the functional currency had been different from what it actually was at the relevant time.

Tax

127 Clause 163 of the Finance Act 1998 provides for the introduction of a general enabling power that will allow tax changes needed as a result of the adoption of the single currency in other Member States to be made by regulation. This enabling power will cover all taxes for which the Inland Revenue is responsible. It will provide scope to change the law to prevent unintended tax charges arising when EMU starts and to facilitate the use of the euro by business.

128 The Inland Revenue issued press releases in January and July containing question and answer statements on tax issues arising as a result of the introduction of the euro in other Member States. Relevant extracts from the January press release were published in the March *Practical Issues*. Relevant extracts from the July press release are published in Chapter 8 of this edition.

Regulation

129 Reviews of all the various regulations have indicated that few substantive changes are necessary to accommodate the introduction of the euro. The FSA regulators' emphasis is on ensuring that firms continue to comply with existing rules, and that they adapt to the euro without disruption to the smooth operation of their business. The FSA regulators have summarised the main policy decisions they have made regarding the introduction of the euro, and listed the guidance they have issued on EMU. This is contained in Chapter 8.

TABLE 3: OVERVIEW OF PRICE SPONSORS' PLANS

Currency	Price source	Displayed on	Sponsor	Will source continue unchanged Yes	No	Designated successor	Original page to display	Comments
ATS	ATS-VIBOR-VIBO	Reuters-VIBO	Reuters		X	EURIBOR	EURIBOR rate	
BEF	BEF-BIBOR-ISDB	Reuters-ISDB	ISDA		X	EURIBOR	EURIBOR rate, converted EURIBOR rate	Replicates local sponsor - ABB See notes
	BEF-BIBOR-BEFIXING	Reuters-BEFIXING	ABB		X	EURIBOR	EURIBOR rate, converted EURIBOR rate	See notes
	BEF-BIBOR-Telerate	Telerate 29200	ABB		X	EURIBOR	EURIBOR rate, converted EURIBOR rate	See notes
DEM	DEM-LIBOR-ISDA	Reuters-ISDA	ISDA		X	Euro LIBOR	Euro LIBOR rate	Replicates local sponsor - BBA
	DEM-LIBOR-BBA	Telerate 3750 Reuters-FRBD	BBA		X	Euro LIBOR	Euro LIBOR rate	DEM rate will also be retained on same page - identical to euro rate
	DEM-LIBOR-Telerate	Telerate 22000	BBA		X	Euro LIBOR	Euro LIBOR rate	
	DEM-FIBOR-ISDB	Reuters-ISDB	ISDA		X	EURIBOR	EURIBOR rate	Replicates local sponsor - ZKA
	DEM-FIBOR-FIBO & -OLD	Telerate 22000 Reuters-FIBO	GBA/ZKA		X	EURIBOR	EURIBOR rate	
	DEM-FIBOR-GBA	Telerate-22000	GBA/ZKA		X	EURIBOR	EURIBOR rate	
	FIBOR-Overnight	Telerate 22000	GBA/ZKA		X	EONIA	EONIA	It is expected that FIONA will continue to be published. From Jan 1999 it will be based on EONIA instead of the current FIBOR overnight rate.
DKK	DKK-CIBOR-DKNH	Reuters-DKNH	Central bank	X		None	Same	Denmark is an 'out' country.
ESP	SPP-LIBOR-BBA	Telerate-3740 Reuters-FRBG	BBA		X	Euro LIBOR	Euro LIBOR rate	
	SPP-MIBOR-BANDE	Reuters-BANDE	Banco de España	X		None	Same	To be displayed as long as market liquidity warrants it; see notes.
	SPP-MBOR-MBOR	Reuters-MBOR	Reuters	Not yet decided		None	Not yet decided	It is expected that a national currency rate based on act/360 and act/365 will be displayed on this page.
FIM	FIM-HELIBOR-SPFB	Reuters-SPFB	Bank of Finland		X	EURIBOR	To be announced	Legislation to ensure changeover
	FIM-HELIBOR-FINBA	Reuters-FINBA	Finnish Bankers' Association		X	EURIBOR	EURIBOR rate, converted EURIBOR rate	Legislation to ensure changeover; see notes.
FRF	FRF-PIBOR-ISDB	Reuters-ISDB	ISDA		X	EURIBOR	EURIBOR rate	Replicates local sponsor - AFB
	FRF-PIBOR-AFB	Telerate-20041	AFB		X	EURIBOR	EURIBOR rate	
	FRF-PIBOR-PIBO	Reuters-PIBOR	AFB		X	EURIBOR	EURIBOR rate	
	FRF-LIBOR-BBA	Telerate-3740 Reuters-FRBF	BBA		X	Euro LIBOR	Euro LIBOR rate	FRF rate will also be retained on same page - identical to euro rate
	FRF-TMM-CDC	Reuters-CDCINDEX1 & BDFB	Banque de France		X	EONIA based	Not yet decided	
	FRF-TAM-CDC	Reuters-CDCINDEX1 Telerate 24882	CDC		X	EONIA based	Not yet decided	
	FRF-FRTAG	Reuters-FRTAG Telerate 20052	AFB		X	EONIA based	Not yet decided	
	FRF-TME-CDC	Reuters-CDCINDEX2 Telerate 24881	CDC	X		None	Unchanged	

	FRF-TMP FRF-TEC10-CNO	Reuters CDCINDEX1 Reuters-BDFB Reuters CNOTEC10	Banque de France CNO	X X	EONIA based None	Not yet decided Unchanged	
GBP	GBP-LIBOR-ISDA GBP-LIBOR-BBA	Reuters-ISDA Telerate-3750	ISDA BBA	X X	None None	Same Same	UK is an ‘out’ country. UK is an ‘out’ country.
GRD	ATHIBOR	Reuters-ATHIBOR	Hellenic Bank Association	X	None	Same	Greece is an ‘out’ country.
IEP	IEP-DIBOR-DIBO	Reuters-DIBO	Dublin Markets Committee	X	EURIBOR	EURIBOR rate, converted EURIBOR rate	See notes
ITL	ITL-LIBOR-ITFX ITL-LIBOR-BBA ITL-LIBOR-ILIR ITL-LIBOR-ITFY ITL-RIBOR-ATIA ITL-RIBOR-RIBO ITL-TMP	Reuters-ITFX Telerate-3740 Reuters-ILIR Reuters-ITFY Reuters-ATIA Reuters-RIBO Telerate-20235 Reuters-ATIA	Banco di Napoli BBA ISDA Banco di Napoli MID MID MID	Not yet decided X X Not yet decided X X X	To be announced Euro LIBOR Euro LIBOR To be announced EURIBOR EURIBOR None	Not yet decided Euro LIBOR rate Euro LIBOR rate Not yet confirmed EURIBOR EURIBOR Same	 ITL rate will also be retained on same page - identical to euro rate Replicates local sponsor - BBA See notes
LUF	LUF-LUXIBOR-ISDB	Reuters-ISDB	ISDA	Not applicable			No rate actually published
NLG	NLG-AIBOR-ISDB NLG-AIBOR-AIBO-DOM & EURO NLG-LIBOR-BBA Reuters-FRBG	Reuters-ISDB Reuters-AIBO Telerate 2979 Telerate 3740	ISDA Central bank BBA	X X X	EURIBOR EURIBOR Euro LIBOR	EURIBOR rate EURIBOR rate Euro LIBOR rate	Replicates local sponsor - central bank NLG rate will also be retained on same page - identical to euro rate
PTE	PTE-LISBOR-LBOA PTE-LISBOR-LBOF PTE-LIBOR-BBA Reuters-FRBH	Reuters-LBOA Reuters-LBOF Telerate-3770	Reuters Reuters BBA	X X X	None None Euro LIBOR	National rate, converted national rate National rate Euro LIBOR rate	See notes See notes
SEK	SEK-STIBOR-SIDE	Reuters-SIDE	Nordic Data Management	X	None	Same	Sweden is an ‘out’ country.
XEU	XEU-LIBOR-ISDA XEU-LIBOR-BBA XEU-PIBOR-ISDB XEU-PIBOR-AFB	Reuters-ISDA Telerate-3750 Reuters-FRBE Reuters-ISDB Telerate-20041	ISDA BBA ISDA AFB	X X X X	Euro LIBOR Euro LIBOR EURIBOR EURIBOR	Euro LIBOR rate Euro LIBOR rate EURIBOR rate EURIBOR rate	Replicates local sponsor - BBA Replicates local sponsor - AFB

Notes: For ‘in’ countries where rates remain unchanged (eg existing panels continue to be used), the national currency will nevertheless become a non-decimal subdenomination of the euro. Converted EURIBOR rate: EURIBOR expressed by applying legacy day-count basis (act/365).
The full version of this table is available on ISDA’s website.
Source: ISDA

TABLE 4: REDENOMINATION PLANS OF EU MEMBER STATES JOINING EMU ON 1 JANUARY 1999

	Plans to redenominate domestic currency government debt	Proposed redenomination date	Redenomination basis	Rounding rule for converted nominal amounts	New minimum nominal amount or lot size	Cash compensation	Will ISINs change following redenomination?
Austria	Only 70 liquid government bond issues, selected in conjunction with banks. (c.34% of tradable debt)	1 Jan 1999	Face value of each individual bond	Round to nearest euro cent	One euro cent	Not applicable	No
Belgium	Dematerialised public debt securities: linear bonds (OLOs) Treasury certificates and strips	2 Jan 1999	Investor holding ('Line by line in each client account')	Round to nearest euro cent	One euro cent until 30 June 1999 then €1000 for OLOs, T-certs and strips; smaller amounts can be held to maturity or, in the case of OLOs sold on-exchange until 30 June or off-exchange to dealers and then to the Fonds des Rentes.	Not applicable	No
Finland	Markka-denominated serial bonds in book-entry form and short-term Treasury bills	1 Jan 1999	Investor holdings	Round to nearest euro cent	One euro cent	Not applicable	No
France	All negotiable government debt (OAT, BTAN, BTF)	1-4 Jan 1999	Investor holdings	Round down to nearest euro leaving a remainder	One euro (except OAT stripped coupons: €0.25)	Remainder is truncated after the fifth decimal, marked-to-market to obtain the 'net amount' (except BTFs will probably be paid 'gross'), accrued interest added, total rounded to nearest cent and paid to investor in cash.	Yes (published by SICOVAM on 4 June 1998)
Germany	Listed Federal government bonds (Federal government bonds, MTNs and Treasury notes) falling due after 19 Jan 1999	1 Jan 1999	Investor holdings	Round to nearest euro cent	One euro cent	Not applicable	No
Ireland	General government debt (bonds and bills)	1 Jan 1999	Investor holdings	Round to nearest euro cent	One euro cent	Not applicable	No

Italy	Marketable government debt (BOT, CCT, BTP, CTZ)	1 Jan 1999	Minimum nominal denomination (in most cases ITL 5,000,000)	Round to nearest euro cent	One euro cent initially; then minimum lot on MOT: €1000; intermediaries will purchase residual amounts of redenominated bonds and the proposed decree requires them to quote current market prices; minimum trading lot on MTS: €2.5 million	Not applicable	No
Luxembourg	All dematerialised linear bonds (OLUX)	1-4 Jan 1999	Investor holdings	Round to nearest euro cent	One euro cent initially; then proposed minimum trading lot of €1000	Not applicable	No
Netherlands	Tradable government debt maturing after 1999	1 Jan 1999	Investor holdings	Round to euro. Legislation is expected to provide for rounding down with cashing out (the French model); however, it will permit the alternative of rounding up and custodians are expected to take this approach.	One euro	Institutions carrying out large-scale securities administration will give, from their own accounts, clients additional nominal amount of the bond needed to round holdings up to the nearest euro.	Yes (published in AEX notice 98-083 of 23 Jul 1998)
Portugal	Tradable government debt maturing after 31 Dec 1999	1 Jan 1999	Investor holdings	Round to nearest euro cent.	One euro cent; no decision yet on subsequent repackaging	Not applicable	No
Spain	All government debt and debt of autonomous communities registered at book-entry system for Government securities	1-4 Jan 1999	Investor holdings	Round to nearest euro cent initially	One euro cent initially; then €100 for Government bonds and €10,000 for T-bills; residual amounts of redenominated bonds will be repackaged by primary dealers.	Not applicable	No

TABLE 5: CONVENTIONING INTENTIONS OF EU MEMBER STATES JOINING EMU ON 1 JANUARY 1999

	Current conventions for Treasury bills (ie discount instruments of less than one year)	Conventions for new Treasury bills issued after entry into Stage 3	Conventions for existing Treasury bills after Stage 3 begins	Current conventions for government bonds	Conventions for new government bonds issued after Stage 3 begins	Conventions for existing redenominated government bonds after Stage 3 begins	Date for reconventioning of existing redenominated government bonds
Austria	Act/360, national business days	Act/360, TARGET business days	Act/360, national business days	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual coupon	First coupon date in 1999
Belgium	Act/365, national business days	Act/360, TARGET business days	Act/360, TARGET business days	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Act/act, TARGET business days, annual coupon	Big bang for all trades with a value date after 1 Jan 1999
Finland	Act/365, national business days	Act/360, TARGET business days	Act/360, probably TARGET business days	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual coupon	First coupon date in 1999
France	Act/360, national business days	Act/360, TARGET business days	Act/360, probably TARGET business days	Act/act, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual coupon	Not applicable
Germany	Act/360, national business days	Act/360, TARGET business days	Act/360, probably TARGET business days	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual coupon	First coupon date in 1999
Ireland	Act/365, national business days	Act/360, TARGET business days	Act/365, probably TARGET business days	Act/act, act/365 and 30/360 national business days, semi-annual and annual coupons	Act/act, probably TARGET business days, annual coupon	Act/act, act/365 and 30/360 (ie no change), probably TARGET business days, semi-annual and annual coupons	Not applicable
Italy	Act/365, national business days	Act/360, TARGET business days	Act/365, probably TARGET business days	30/360 (both settlement date and coupon payment date included), national business days, semi-annual coupons	Act/act (settlement date excluded, coupon payment date included ie standard approach), TARGET business days, semi-annual coupon	Act/act (settlement date excluded, coupon payment date included ie standard approach), probably TARGET business days, semi-annual coupon	First coupon date in 1999 for coupon bonds. 1 Jan 1999 for zero coupon bonds (although those maturing before 31 Dec 1999 will not change).
Luxembourg	No bills in issue		Not applicable	30/360, national business days, annual coupons	Act/act, TARGET business days, annual coupon	Act/act, TARGET business days, annual coupon	First coupon date in 1999
Netherlands	Act/360, national business days	Act/360, TARGET business days	Act/360, probably TARGET business days	30/360, national business days, annual coupons	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual coupon	First coupon date in 1999
Portugal	Act/365, national business days	Act/360, TARGET business days	Act/360, probably TARGET business days	30/360, national business days, annual and semi annual coupons	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual and semi-annual coupons	First coupon date in 1999
Spain	Act/act, national business days	Act/360, TARGET business days	Act/360, probably TARGET business days	Act/act (accrued interest), act/365 (yield calculations), national business days, annual coupons	Act/act, TARGET business days, annual coupon	Act/act, probably TARGET business days, annual coupon	Yield calculations change to act/act by end Oct 1998; and for MEFF contracts from 17 Sept 1998

Note: Business days are days when interest that is due will be paid.

TABLE 6: NON-GOVERNMENT BONDS IN THE EURO AREA: REDENOMINATION AND CONVENTIONING

	Will national legislation allow redenomination without bondholder consent?	Will national authorities co-ordinate the timing of redenomination and, if so, what will the timetable be?	Current conventions for corporate bonds	Expected conventions for new corporate bonds issued after Stage 3 begins	Expected timing of any reconventioning of corporate bonds
Austria	Yes (if government methodology used)	No corporate issuers are expected to redenominate.	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
Belgium (a)	Yes (if government methodology used)	CIK will manage the process; no non-government issuers have announced an intention to redenominate yet; redenomination of physical bonds is not recommended.	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	1 Jan 1999 (big bang)
Finland (b)	Yes (if government methodology used)		30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
France (c)	Yes (government methodology mandatory)	No redenomination over 1-4 Jan 1999. Issuers wishing to redenominate in 1Q1999 must notify the authorities by 31 Aug 1998; 2Q1999 by 31 Oct 1998; 3Q1999 by 31 May 1999.	Act/act, national business days, annual coupon	Act/act, business days under discussion, annual coupon	Not expected to reconvention prior to redenomination, if any
Germany	Yes (under terms set out in Article 6 (3) of Act on Introduction of the Euro); one-month notice period required	DBC has recommended that bonds be redenominated on the third Fridays in Feb, May, Aug and Nov 1999 and the cost to issuers will be lower at these times; a survey indicated that 4,000 of 15-20,000 bond issues could in theory redenominate over 1-4 Jan 1999. Jumbo and global Pfandbriefe, KFW, Dresdner Bank, Allianz and Deutsche Telecom have confirmed that they will do so. It is unclear how many other issuers will do so.	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
Ireland	Yes (if government methodology used)		Act/act, act/365 and 30/360, national business days, annual coupon	Act/act TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
Italy	Yes (government methodology mandatory for issues with a minimum lot of 1 million lira or more)	Consob will establish rules and timings; Ferrovie dello Stato will redenominate over 1-4 Jan 1999; public administration debt not quoted on official markets will redenominate on 1 Jan 2001; few Italian banks and corporations are expected to redenominate bonds.	30/+ 1/360 settlement date and coupon payment date included, national business days, semi-annual coupon	Act/act (settlement date excluded, coupon payment date included, ie standard approach), probably TARGET business days, semi-annual coupon	Not expected to reconvention prior to redenomination, if any
Luxembourg	Yes (if government methodology used)	ABBL has recommended against redenomination of bonds in physical form.	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
Netherlands	Yes (government methodology mandatory)	No corporates will redenominate over 1-4 Jan 1999. For any that redenominate subsequently, AEX plan a compulsory timetable.	30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
Portugal	Yes (if government methodology used); 30 days' notice required.		30/360, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any
Spain	No prescribed methods	Possible that up to 250 issues could redenominate over 1-4 Jan 1999; regional governments are expected to redenominate issues when the regional stock markets in which they are traded convert.	Act/365, national business days, annual coupon	Act/act, TARGET business days, annual coupon	Not expected to reconvention prior to redenomination, if any

Note on agreed formula for the calculation of euro consideration on a trade in a non-redenominated bond: (a) Belgium: 1. (Nominal in NCU times price)/conversion rate (no rounding); 2. accrued interest in NCU/conversion rate; 3. consideration = 1+2; 4. round consideration. (b) France: OTC: as Germany; On exchange: system calculates proceeds by converting final NCU cash consideration. (c) Germany : 1. (Nominal in NCU times price)/conversion rate rounded to 2 decimals; 2. accrued interest/conversion rate rounded to 2 decimals; 3. brokerage/conversion rate rounded to 2 decimals: 4. commission/conversion rate rounded to 2 decimals; 5. consideration = 1+2+3+4.

TABLE 7: CONVERSION PLANS FOR EXCHANGE-TRADED DERIVATIVES IN THE EURO AREA

	Conversion timing	Conversion method	Conversion facility	Rounding method	Rounding amount
Austria	Big bang	Legacy contract converts into one new euro contract plus cash adjustment. Stock option contracts will be converted using conversion rate; new contract has same value as legacy. Parallel trading of DM currency future.	Not applicable		2 decimal places. Stock options rounded to 1 decimal place.
Belgium	Big bang	Stock and currency options converted using conversion rates; new contract has same value as legacy. Other legacy contracts convert into two euro contracts.	Not applicable	Stock and currency options: ignore and write off difference. Other contracts: odd lots created.	Five decimal places. 3-month BIBOR futures rounded to 2 decimal places.
Finland	Big bang. No conversion of LEX stock lending contracts.	Contracts converted using conversion rate; new contracts have same value as legacy.	Not applicable	Ignore and write off difference	Unrounded
France	PIBOR futures and options converted before and after conversion weekend. Other contracts: big bang	Each CAC 40 stock index and index options contract will convert into two euro contracts. Parallel trading of PIBOR futures and options. Other contracts: convert using conversion rate; new contracts have same value as legacy.	STF/VPC/MPC for PIBOR futures; STF for PIBOR options	PIBOR futures and options: either write off difference or cash settlement. CAC 40 index: odd lots created. CAC 40 stock index options: ignore and write off difference.	Not applicable to most contracts
Germany	Bund futures and options, 1 and 3-month Euromark futures, medium and short-term notional bond futures and options and jumbo Pfandbriefe derivatives will convert pre-conversion weekend. Other contracts: big bang	Parallel trading of contracts that will convert pre-conversion weekend. Each DAX German index futures and options contract and MidCap DAX futures contract will convert into two euro contracts. Other contracts: convert using conversion rate; new contracts have same value as legacy.	STF offered for derivatives that will convert pre-conversion weekend.	DAX German index futures and options and MidCap DAX futures contracts: odd lots created. Stock options and Volax future: ignore and write off difference	DAX index futures and options and Volax future rounded to 2 decimal places. Other contracts: not applicable
Italy	Only IDEM equity option will convert.	Contracts converted using conversion rate; new contracts have same value as legacy.		Ignore and write off difference	4 decimal places
Netherlands	Big bang	Contracts converted using conversion rate; new contracts have same value as legacy.	Not applicable	Ignore and write off difference	5 decimal places
Portugal	Big bang	Legacy contracts convert into one new euro contract plus cash adjustment.	Not applicable	Cash settlement of the difference	Conversions done at account level, rounding to nearest integer. PTE telecom future rounded to cent.
Spain	Big bang	Legacy contracts convert into one new euro contract plus cash adjustment.	Not applicable	Cash settlement of the difference	2 decimal places

Notes: STF = spread trading facility; VPC = voluntary position conversion; MPC = mandatory position conversion; further information can be found on FIA's webpage.

CHAPTER 3: OPERATIONAL FRAMEWORK OF THE ESCB

A EUROPEAN CENTRAL BANK

1 The European Central Bank (ECB) was established on 1 June, with the formal inauguration on 30 June. The allocation of responsibilities among Executive Board members was agreed at its first meeting on 2 June; and the ECB's internal organisation was decided at the first Governing Council meeting on 9 June (as shown in Chart A). It was announced that the Governing Council (which comprises the Executive Board and the Governors of the 'in' NCBs) would meet at least once a month for the remainder of 1998, and a meeting schedule for 1999 was set. The Governing Council will, as a general rule, meet on Thursdays every other week, starting on 7 January 1999. In addition, it has been agreed that the General Council (which includes the Governors of 'out' NCBs) will meet once a quarter, beginning on 4 March 1999 (the last 1998 meeting being on 1 December). The respective responsibilities of the Executive Board, Governing Council and General Council were identified in the June *Practical Issues*.

2 The Governing Council has reached decisions on a number of matters, as set out below.

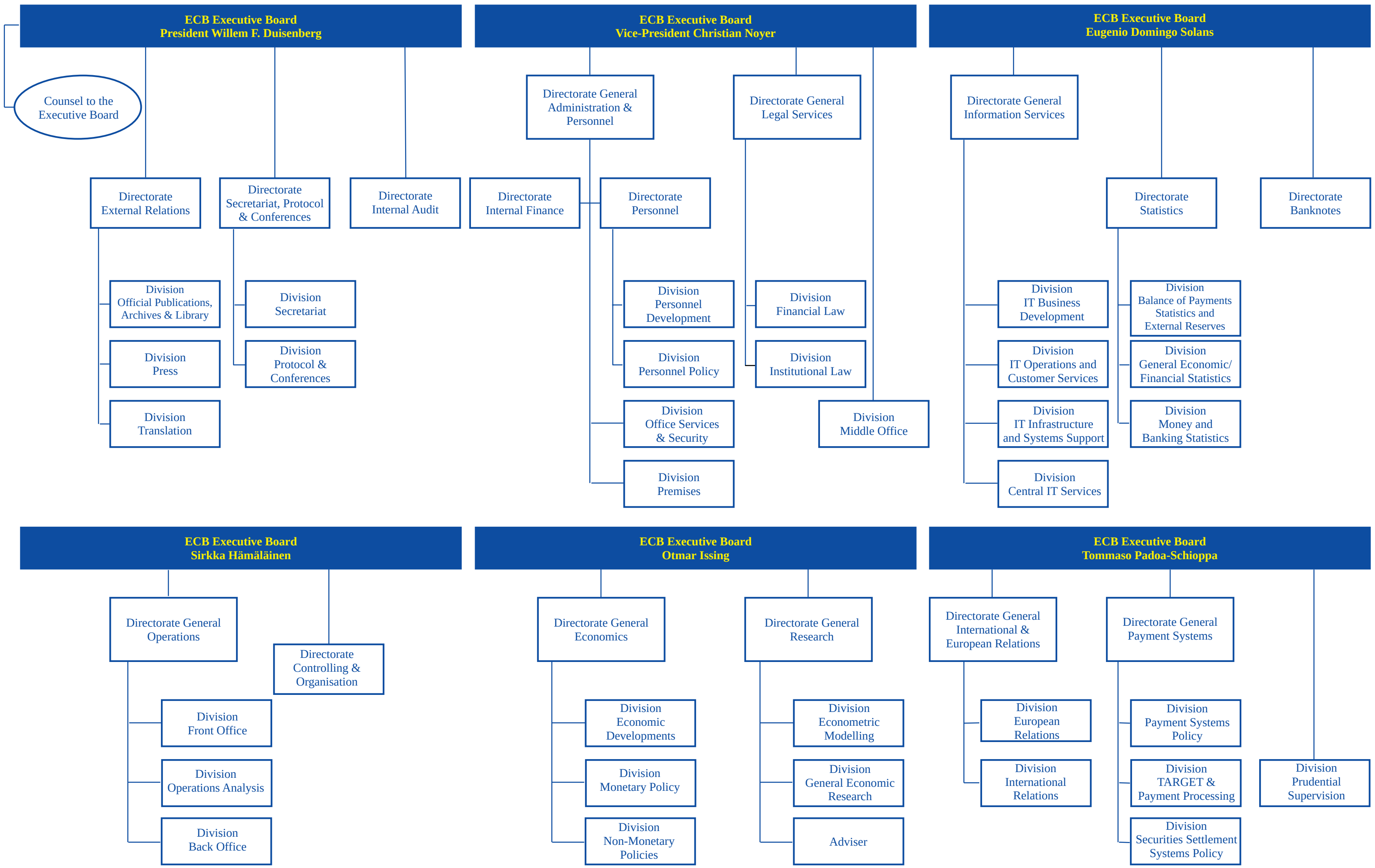
- *Allocation and composition of the ECB's share capital.* The 11 'in' NCBs will pay up in full their respective subscriptions to the ECB's capital according to the key set out in the Maastricht Treaty. As a result, the ECB will be endowed with an initial capital of slightly under €4 billion. 'Out' NCBs will also, in accordance with the Treaty, make a minimal contribution to the ECB's capital (in the amount of 5% of their subscribed capital share). On this basis, the Bank of England, which has a subscribed share capital of 14.71% of the total, will contribute €36.8 million, which will be offset against repayment of most of the capital subscription made to the EMI (of ECU94.5 million).
- *Internal matters, including Rules of Procedure and establishment of Committees.* There will be 13 committees of the European System of Central Banks (ESCB), as follows:

Accounting and Monetary Income	International Relations
Banking Supervision	Legal
Banknotes	Market Operations
Budget	Monetary Policy
External Communications	Payment and Settlements Systems
Information Technology	Statistics
Internal Auditors	

  Apart from the Banking Supervision Committee, which includes full representation from NCBs and the supervisory authorities in all 15 EU countries, it has been agreed that representatives of 'out' NCBs will participate in a committee when it deals with a matter within the General Council's field of competence. 'Out' representatives may also be invited to take part whenever deemed appropriate by the chair of a committee and the ECB Executive Board.

CHART A

EUROPEAN CENTRAL BANK



Fuller details of the following decisions are set out elsewhere in this *Practical Issues*:

- *TARGET decisions.* Agreement has been reached on the pricing structure for TARGET, and on the principle of 'out' NCBs' access to intraday liquidity in TARGET.
- *Reserve requirements.* Agreement has been reached on the modalities of a minimum reserve system.
- *Transfer of foreign reserve assets.* The size and form of the initial transfer of foreign reserves to the ECB has been agreed.
- *ERM II.* The ERM II Agreement has been finalised and signed.
- *Euro banknotes.* Agreement has been reached on the geographical basis of euro banknote production, and on a number of legal instruments aimed at enhancing the protection of euro banknotes.
- *Statistics and sanctions.* Recommendations have been adopted for EU-wide legislation on the collection of statistical information by the ECB and on the power of the ECB to impose sanctions; and several EMI reports on statistics have been formally adopted.
- *Euro reference exchange rates.* Agreement has been reached on a number of issues related to the quotation and publication of reference exchange rates for the euro.

3 Among other topics that will be discussed by the Governing Council before the end of this year are the monetary policy strategy of the ECB and the allocation of the ESCB's monetary income.

B MONETARY POLICY IN STAGE 3

Operational framework of the ESCB

4 *General Documentation.* The ECB has just published an updated and final version of the *General Documentation on ESCB Monetary Policy Instruments and Procedures.* This is counterparties' official guide to ESCB monetary policy operations. It contains some important new information compared to the previous version published by the EMI in September 1997.

5 *Reserve requirements.* At its July meeting, the ECB Governing Council decided to impose reserve requirements on credit institutions established within the euro area as a means of stabilising money market interest rates and creating or enlarging a shortage of liquidity in the market vis-à-vis the ESCB. The required ratio will be set at between 1.5% and 2.5% of an institution's reserve base. (The ECB Governing Council will decide the exact ratio later this year.) The reserve base will comprise all deposits and debt securities issued, including foreign currency-denominated liabilities but excluding interbank liabilities, liabilities to the ESCB and all off balance-sheet items. The requirement on liabilities with an original maturity of more than two years and repos will be set at 0%. Every institution will be able to deduct a lump sum allowance in the order of €100,000 from its reserve requirement. In effect, this will exclude the very smallest institutions from the obligation to hold reserves.

6 Reserve holdings will be calculated as the average of an institution's end-of-day balances over a maintenance period starting on the 24th of each month and ending on the 23rd of the following month. The reserve base used to calculate the reserve requirement in any given maintenance period will be derived from the balance-sheet reported to the NCB as part of the

ECB's money and banking statistics at the end of the previous calendar month. Reserves must be held at the NCB in the country where the institution is located even if it is incorporated elsewhere, so a German branch of a French bank and a German branch of a US bank must both hold reserves with the Bundesbank. Reserve accounts may be used as settlement accounts, meaning banks will be able to draw on their reserves to make payments during the day. The reserve requirement will be remunerated at the average of the repo rate over the maintenance period. Any reserve holdings in excess of the requirement at the end of the maintenance period will not be remunerated at the repo rate, but the overnight deposit facility will be available at a lower deposit rate. All institutions subject to reserve requirements will have access to standing facilities and be able to participate in open market operations. (In any *ad hoc* fine tuning operations, counterparties may be restricted eg to those institutions most active in the money markets.)

7 *Open market operations.* Each week (normally on Tuesdays), the ECB will hold tenders for two-week repo. These operations will be used to steer market interest rates and signal the stance of monetary policy. Once a month, the ECB will hold monthly tenders for three-month repo. These are intended solely to provide liquidity to the banking system. In both cases, bids must be made to the local NCB but the ECB will allot the funds centrally. The *General Documentation* includes the timetable of ESCB monetary policy tender operations for 1999, formulated to avoid tender allotment or settlement days on national holidays (although all national RTGS systems are expected to open on all TARGET operating days, including national holidays). The first ESCB two-week repo tender will be held on 5 January 1999 and settle on 7 January.

8 *Standing facilities.* Credit institutions will have access to overnight deposit and collateralised marginal lending facilities with their local NCB. The deposit facility rate will be at a spread below the repo rate and the marginal lending facility rate at a spread above it. The ECB will decide the width of this 'corridor', which will effectively limit volatility in overnight market interest rates. Averaging of reserve requirements is likely to mean that an institution need rarely use the standing facilities, except perhaps at the end of the reserve maintenance period.

9 *Eligible assets.* The ESCB will provide liquidity only by way of repo of, or secured loan against, eligible assets. The ECB will shortly publish a detailed list of the assets eligible for use in ESCB monetary policy operations, by individual ISIN or other identifier. This will be made available to counterparties on the ECB's website. Any euro securities meeting harmonised criteria set by the ECB will be eligible for Tier 1. These include, for example, that they are senior debt securities rated above a defined threshold, that the issuer is established in the EEA and that the security is deposited with an NCB or securities depository in the euro area. Additional assets proposed by individual NCBs will be eligible for Tier 2. All eligible assets will be useable in all ESCB operations, with the possible exception of any non-euro Tier 2 assets, which may be restricted, for example to operations with the NCB that proposes those assets. Counterparties will be able to use assets located in another euro area CSD or ICSD to obtain credit from the NCB in the country where it is established. For such cross-border transactions, NCBs will act as each others' custodians. (There may also be links between securities settlement systems.) The ESCB's future counterparties should therefore be able to plan their participation in ESCB operations on the basis that they will be able to use the full range of eligible assets on the list.

10 *Margins and haircuts.* The ESCB will apply an initial margin of 1% to intraday and overnight credit, and an initial margin of 2% to open market operations. In the case of Tier 1

securities, the following valuation haircuts will be added, according to the residual maturity of the assets.

Residual maturity:	
up to 1 year and FRNs	0%
more than 1 year and up to 3 years	1.5%
more than 3 years and up to 7 years	2%
more than 7 years (coupon bonds)	3%
more than 7 years (zero coupon bonds and strips)	5%

11 The formula linking the liquidity extended to the value of the assets provided will be:

$$(1+m)L \leq (1-h)C$$

where m = initial margin, L = liquidity extended, h = asset haircut and C = value of collateral

12 These haircuts will be identical for all Tier 1 securities regardless of the issuer or asset type. Tier 2 assets will be subject to higher haircuts determined by the NCB in the national market where the asset is traded.

13 The ESCB is well into the exhaustive programme of testing for its monetary policy operations and procedures that began in July. In the next stage, this will be fully integrated with other ESCB testing, eg of the TARGET system.

C RESERVES MANAGEMENT AND ERM II

Foreign reserve assets

14 The Governing Council has decided on the size and form of the initial transfer of foreign reserve assets to the ECB from the ‘in’ NCBs, which will take place on 1 January 1999. The initial transfer will be some €40 billion (ie the maximum allowable amount of €50 billion adjusted downwards for the ‘outs’ by deducting their shares in the ECB’s capital subscription key). 15% of this transfer will be in gold, with the remaining 85% in foreign currency assets.

15 Before end-year, the Governing Council will adopt an ECB Guideline under Article 31.3 of the ESCB Statutes, which will subject all operations in foreign reserve assets remaining with the ‘in’ NCBs – including gold – to approval by the ECB.

ERM II

16 On 11 September, the ECB published the final version of the *ERM II Agreement* between the ECB and the ‘out’ NCBs. This lays down the responsibilities of participants and the operating procedures of the new exchange rate mechanism, which will replace the existing ERM/EMS when Stage 3 of EMU begins on 1 January 1999.

17 Membership of ERM II will be voluntary, and the UK has no current intention of joining. The Bank of England is nonetheless a signatory to the Agreement, which envisages roles and

responsibilities for all NCBs not participating in the single currency, whether or not they are members of ERM II. In particular, it will be a task of the General Council of the ECB to monitor the functioning of ERM II, and to serve as a forum for monetary and exchange rate policy co-ordination. The responsibilities of the 'out' NCBs will be the same as those under the present ERM/EMS: they will report regularly on their intervention and other foreign exchange operations; and they will need to seek prior approval from the ECB and other 'out' NCBs for intervention or large transactions in their currencies where the amounts exceed mutually agreed thresholds, or where the transactions in question are of a size likely to have a market impact.

18 The ERM II Agreement is modelled on existing arrangements but modified to take account of institutional changes such as the creation of the ECB and the euro, and the formal pooling of euro area foreign reserves with the ECB. The euro will be the reference currency for the system, with central rates and fluctuation bands expressed in terms of the euro. ERM II will therefore have a 'hub-and-spokes' structure, with the euro at its centre: this contrasts with the present parity grid arrangement, which is based on a series of bilateral rates for each participating currency. The standard fluctuation band will be +/-15% around the central rates, although the Agreement allows for the negotiation of narrower bands. Intervention at the margins will in principle be automatic and unlimited, as will the availability of financing through the Very Short-Term Financing (VSTF) facility. However, by contrast with the present ERM/EMS, the ECB and participating 'out' NCBs will have the formal right to suspend such intervention and its financing if there were a conflict with their primary objective of price stability.

D STATISTICAL ISSUES

19 The Governing Council has formally adopted several reports prepared by the EMI regarding the compilation of statistics in EMU. All the relevant conclusions have been recorded in previous editions of *Practical Issues*.

E EURO BANKNOTE PREPARATION

20 Now that the final designs, and technical specification, for the euro notes have been approved, work has been concentrated on preparing for extensive pre-production trialling, scheduled for the autumn. Once the results have been analysed and final, minor, adjustments made to the specification, full production can get under way.

21 This preparatory work embraces origination; proofing and platemaking; and testing and evaluating the results. To share the load, and also minimise the risk of delay, this work is being done on a co-operative basis. The Bank of England Printing Works is thus involved in the origination of two denominations and is also participating in the pre-production trial with a prime responsibility for providing reference sheets for one denomination.

22 The Governing Council has agreed on a number of legal instruments aimed at enhancing the protection of euro banknotes. These cover, *inter alia*, the issue of so-called 'fancy' banknotes, as well as the harmonisation of certain anti-counterfeiting measures. In addition, a Decision formally establishing the specification and design of euro banknotes has been adopted, together with rules on the authorised reproduction of the designs and a regime for the exchange of damaged banknotes and their eventual withdrawal. The relevant legal instruments will be published in due course in the *Official Journal*.

CHAPTER 4: PAYMENTS AND OTHER FINANCIAL INFRASTRUCTURE

1 This Chapter reviews recent progress in the preparations in London and elsewhere to facilitate wholesale euro payments and securities settlement from the beginning of next year. It should be read in conjunction with the relevant information in Chapter 2 on the enhanced variety of payment systems which will be available to effect euro payments and the implications for payments routing. The Chapter is divided into three sections, on wholesale euro payments, securities settlement and other financial infrastructure.

A WHOLESALE EURO PAYMENTS

Banks' approaches to the new payments landscape

2 A key feature of the new landscape following EMU will be the wide range of alternative means of making and receiving euro payments which will be available to banks. It is not clear how they will respond. Some banks will continue to be payment banks, ie members of one or more euro payment systems and offering correspondent banking services to third parties. Other banks may adopt one or more of the following alternative courses.

- Continue to use correspondent banking, but select one correspondent in a single centre with which to hold their main euro account to receive euro from, and pay to, any of the 15 EU countries.
- Retain the present architecture, at least for a time, of an account with a correspondent in each of a number of countries so that funds are paid and received domestically, in the local payment system.
- Make their own payments directly, so that the services of a correspondent are no longer needed, via one or more of the several net and gross payment systems which will become available (including the linked TARGET network of RTGS systems). Payments could be made directly either through local membership of those systems or remote membership from another centre.

3 Because of this variety, banks need to ensure both that their systems can handle alternative ways of paying euro and also that euro together with national currency units can be paid and received in a number of different countries. Where banks have not already decided how payments are to be made and received, these decisions need to be made urgently, in order to satisfy the recommendation that settlement instructions for new euro (and outstanding ECU) transactions, and any changes to be made to settlement instructions for trades entered into in national currency units before 1 January 1999, be promulgated no later than 30 September (see Chapter 2, section B).

4 There is a collective market interest both in prompt decision-making and in a quick turn round of service requests put to payment banks. Failure to respond quickly would jeopardise other institutions' preparations and their ability to cope with a potentially vast number of new or altered settlement instructions, thus introducing unnecessary risks to payment flows. Whilst remitters of funds will be liable for the consequences of a failure to send funds according to new

or revised instructions where adequate notice has been provided, beyond a certain point – which can only be defined by the respective parties involved – it will not be possible safely to implement new instructions ahead of end-year.

5 In deciding between correspondents, banks will consider their relative efficiency in making and receiving payments, the arrangements offered for sweeping or pooling of balances for the purposes of liquidity management, and the levels of remuneration available on any unexpected surpluses. Also relevant may be whether the correspondent is a member of more than one payment system, and has contingency arrangements for making and receiving payments in the event of disruption to normal channels.

6 In determining their proposed service levels, correspondents need to know in detail the precise timetable to which each payment system will work during the day, including any cut-off times for particular types of payment, and the approach being taken by domestic payment systems and their participant banks on domestic national holidays. Banks intending to make and receive their own payments via direct membership of one or more payment systems rather than through correspondent arrangements similarly need to understand these details. In addition, they must be aware of the best practice recommendations of the Heathrow Group on payment routing set out in Chapter 2.

7 The direct consequences of the 'Heathrow conventions' are not yet fully apparent because banks are still exchanging SSIs. It appears, however, that many banks are choosing to pool their euro liquidity as much as possible in a single centre. Payment banks are generally retaining multiple access to payment systems, and in a number of cases connecting to new systems, to ensure they can use the most popular systems and to deal with contingencies.

8 Although the exchange of SSIs does not automatically determine the payment system to be used, many pairs of payment banks are currently developing understandings about the normal routings between them. The EBA appears to have been successful in persuading many members to put substantial volumes of payments through its system at the beginning of Stage 3. TARGET will clearly be the system of choice for moving liquidity from one location to another, for processing particularly large payments, and where users require immediate finality. It may also be attractive to smaller participants who wish to connect to only one system and prefer not to rely on correspondents. Moreover, some central banks are encouraging participants to ensure there is some balance in payment flows between systems in order to avoid overloading any one system, particularly at the start of EMU next January.

9 In practice, the larger payment banks are generally keeping their options open. Even where their initial plan is to put the majority of their payments through one route, they are often seeking to retain the capability to switch payments between alternative systems. From January 1999, all participants will be monitoring very carefully the performance of the systems they use, by assessing their robustness, speed, susceptibility to gridlock, accuracy, effectiveness of response to hitches, as well as features such as price and breadth of membership.

10 Given the size and complexity of the changes being made to euro payment systems, and notwithstanding the comprehensive testing being undertaken, some initial teething problems seem inevitable, if only because of the lack of familiarity of users and operators with the systems. In many cases these should be capable of quick resolution if the right information is exchanged

between counterparties; for example, if funds appear not to have arrived when expected, they may have been sent by an unexpected route or to the wrong account. There will need to be close co-operation between system operators and users. To assist, the Heathrow Group is developing a common contact list of payment and treasury managers who can deal with specific problems, and who will have access to the appropriate decision-makers in their respective institutions. In addition, the banks involved are discussing how to encourage their customers, including banks using their correspondent services, to give payment instructions as early as possible, to maximise the time available for managing any problems and end-of-day positions. The Group is also discussing conventions on compensation between banks, where any problems are not resolved by the end of the day, to cover the costs arising from failed payments. Finally the Group is discussing co-operative contingency arrangements to deal with any more significant problems, for example with one of the Group members' own systems.

S.W.I.F.T.

At a technical level, S.W.I.F.T. has developed a euro-related information mechanism (ERI) within existing S.W.I.F.T. message formats to cope with the introduction of the euro, and in particular to enable the inclusion where relevant of information in both euro and national currency units.

To help credit institutions communicate, in a cost-effective way, their strategy for routing cross-border euro payments to their customers and counterparties, S.W.I.F.T. is preparing a series of publications, namely a Treasury Directory, a Payments Directory and a Market Infrastructure Directory.

Treasury Directory. This will enable subscribers to access and distribute SSIs automatically using authenticated messages. By sending a message to S.W.I.F.T.'s central database, users will be able to advise their counterparties of any changes in euro treasury correspondents.

Payments Directory. This will offer a mechanism that enables financial institutions to exchange, in a secure manner, critical operational information on payment channels world-wide, and thus facilitate straight-through processing. Like the Treasury Directory, the Payments Directory will be used to publish, and advise users of, new correspondents, including - in this case - new euro payment correspondents. In addition, it could be used by financial institutions to promote their own products and services.

Market Infrastructure Directory. This is being designed to provide details of all Bank Identifier Codes (BICs) addressable through RTGS systems (including all those participating in, and connected to, TARGET) and a number of non-RTGS systems (including EBA and EAF). S.W.I.F.T. published a pre-release of this Directory in August. The official release will be available with the December issue of the BIC Directory.

S.W.I.F.T. has also published a guide, *Converting to the euro*, that focuses on the operational impact of the conversion to the euro on cross-border interbank and wholesale flows. This is available from S.W.I.F.T. by e-mail at: *euro@swift.com*

CHAPS euro

The attractions of using CHAPS euro

11 The June *Practical Issues* set out the benefits of using CHAPS euro, which will serve both as a stand-alone RTGS system based in London with global reach and as CHAPS euro members' access route to TARGET. Essentially, CHAPS euro will be riskless, robust, highly efficient in handling large volumes, competitive in price and have broad geographic coverage. It will initially have 20 direct members, of whom 5 are not currently direct members of CHAPS sterling, and some 400 indirect members including the world's major banks. A number of other global banks have expressed interest in becoming direct members during next year, but are not ready to do so before end-1998. The CHAPS Clearing Company will continue to welcome new members in future, including on a remote access basis. The Company has developed a streamlined entry process and has announced a series of possible joining dates over the next two years from which applicants can choose.

12 As mentioned in the Box above, the S.W.I.F.T. Market Infrastructure Directory will include details of all the so-called bank identifier codes (BICs) addressable over RTGS systems linked through TARGET: members of CHAPS euro are ensuring their world-wide BICs are accessible over CHAPS euro, to encourage, where possible, straight-through processing of payments. This will improve the efficiency of CHAPS euro by enabling users to access simply a very wide range of credit institutions.

Testing

13 The recent focus of attention of those developing CHAPS euro has been the comprehensive testing programme, which continues to proceed successfully and on schedule. The first phase, of group testing, was completed at end-June. The second phase has started and is scheduled to run until early October. This phase aims to prove final software versions for CHAPS euro members, to integrate the new members, to ensure that CHAPS euro is Year 2000 compliant and to load various industry databases, including the S.W.I.F.T. Market Infrastructure Directory. New CHAPS euro members have already successfully completed their certification testing and so have been integrated into the mainstream testing programme.

14 Each CHAPS euro payment should take no longer to process than a sterling RTGS payment takes at present, ie under 1 minute. An end-to-end TARGET payment has taken between 5 and 8 minutes during trialling, although the theoretical maximum time under normal circumstances has been set at 30 minutes.

TARGET

Technical preparations, including testing

15 The technical preparations for TARGET are continuing to make good progress. All NCBs and the ECB have now successfully completed multilateral tests in small groups, with the final group completing its testing during early June. A further test involving the ECB and all NCBs together has also been successfully completed.

16 The simulation phase of TARGET testing began on 1 July. The aim of this stage of testing is twofold: first, to reinforce the technical functionality of the system; and secondly, to hand over a stable system to users to enable 'migration to production' in December. All NCBs and the ECB have been participating in this simulation phase, and since 15 July credit institutions have been involved in end-to-end simulation testing. The CHAPS community has been actively involved from the outset in all of these end-to-end tests and, in contrast to some other countries, no CHAPS euro members have had to be simulated. CHAPS euro members will continue to be present on all testing dates and by the end of the test period, all individual members will have tested. As a community, CHAPS euro has already successfully sent and received TARGET messages to and from all EU countries. The processing of payments during testing is working well and end-of-day procedures are also proving quite stable.

17 The CHAPS Company has asked whether, as part of the CHAPS euro network trial on the live operational configurations on 2 January, it would be possible for members to make payments across TARGET. Whilst the ECB has arranged a connectivity test on 2 January between NCBs to prove the Interlinking network, at present there are no plans to include credit institutions in this test. This is partly because of potential difficulties for 'in' countries' RTGS systems: they will already be 'live', recording actual holdings of credit institutions converted from national currency units, and these data could be corrupted by trial payments.

18 Each NCB, together with the ECB, is currently working through a final TARGET risk analysis. The analysis, as well as identifying any remaining risks for the project, includes Year 2000 issues. Auditors have been closely involved in this process.

19 The ECB published on 1 July two explanatory documents on the TARGET system, a *TARGET Brochure* and *The TARGET Service Level*. Both are accessible on its website. In addition, the CHAPS members indicated early in 1998 that they would welcome an authoritative document drawing together a number of important business issues relating to TARGET (eg the procedure for return payments, and end-of-day procedures) and providing a uniform interpretation of them. The ECB is preparing such a document for publication later this year. The ECB also aims to release in the autumn a further TARGET *Progress Report*, describing developments and agreements reached since the September 1997 *Progress Report*.

20 The drafting of the legal framework for TARGET is continuing. Since the June *Practical Issues*, progress has been made on the outstanding issues in the Guideline, which will set out the legal arrangements between 'in' NCBs; and in the Agreement, which provides the legal basis for 'out' NCBs to connect to TARGET. In particular, the legal terms and conditions for the provision of intraday credit by 'out' NCBs are now being elaborated. NCBs have also been involved in the verification of the legal and operational rules of each other's domestic euro RTGS systems, to ensure compliance with the provisions of the Guideline and Agreement.

ECB Governing Council decisions on TARGET

21 Two important decisions have been taken on TARGET by the Governing Council since it was established in June, on pricing and on 'out' countries' access to intraday liquidity.

22 *TARGET Pricing*. As expected, the ECB Governing Council endorsed in June the EMI's prior recommendation for a fee structure in which the price of a cross-border TARGET payment

is reduced for high volume users (measured at national level). The fee charged for cross-border transactions will be based on the number of transactions sent by a TARGET participant within a single RTGS system, according to the following scale:

€1.75 for each of the first 100 transactions per month;
€1.00 for each of the next 900 transactions per month;
€0.80 for each subsequent transaction in excess of 1,000 per month.

23 On average, the tariff equates broadly to a fee of €1.1 per payment. This is considerably lower than the €1.5-3 range provisionally indicated last year by the EMI Council, because of better than expected performance by a number of the constituent RTGS systems, but also to ensure that TARGET remains competitive with the obvious alternative netting systems, such as the EBA.

24 These prices will be applied uniformly to all *cross-border* payments generated in all the 15 RTGS systems participating in, or connected to, TARGET including CHAPS euro. As for *domestic* CHAPS euro payments, the Bank and the CHAPS Clearing Company have recently completed discussions on the proposed RTGS tariff. It has been agreed that the Bank will charge CHAPS members 15 pence (around €0.22 at current exchange rates) per item processed by it. This is competitive with headline price levels being considered by a number of other RTGS systems in TARGET and the major competitive netting systems. Headline prices of course do not tell the whole story; for example, they do not take account of other charges normally also levied by systems (including annual membership fees), or by banks themselves in relation to their own customers, reflecting their own additional processing costs.

25 *Access to intraday liquidity in ‘out’ countries.* In July, the ECB Governing Council considered the terms under which the euro RTGS systems in ‘out’ countries would connect to TARGET and in particular the issue of the provision of intraday credit to ‘out’ NCBs and by ‘out’ NCBs to participants in their systems. The Bank has consistently regarded the provision of intraday credit as necessary to ensure the efficiency of TARGET as a whole and to avoid the risk of gridlock. The Bank believes that ‘out’ countries connected to TARGET should contribute to the liquidity of the system by being able to provide credit to their participants. But some ‘in’ countries had been concerned that there could be monetary policy consequences if ‘out’ countries were to provide intraday credit. Such concerns have generally related to the risk that intraday credit might ‘spill over’ into overnight credit. Competition between payment systems and financial centres may also have been an issue. However, it is now widely accepted that all 15 NCBs have an interest in the efficiency of TARGET as a whole.

26 The Bank is pleased that the ECB decided it was right to permit the provision of intraday credit by ‘out’ NCBs, and to find a way to facilitate it. The Council, at its July meeting, took high-level decisions to support TARGET in this way, noting that its approach was innovative. The Bank has welcomed these decisions of principle and is committed to helping the ECB to make them work in practice. The practical implementation of the decisions is still being discussed between the ECB and NCBs and is likely to be approved finally by the ECB Governing Council at its meeting on 13 October.

27 The broad features of the package agreed by the Council are that:

- 'out' NCBs could offer intraday liquidity to their own RTGS participants on the basis of a euro deposit with the ESCB (set at €3 billion for the UK and €1 billion for each of the three other 'out' countries);
- there will be a €1 billion ceiling on each RTGS participant's use of intraday credit from its own 'out' NCB;
- after a liquidity deadline (5.00pm CET), 'out' banks can still make payments, but only on the basis of positive cash balances;
- to address the risk of spillover, 'out' banks not squaring their positions by close of business will be charged a penalty rate of 5% over the ESCB's marginal lending rate; and
- 'out' banks will be allowed to keep overnight balances with their local NCB, which will be remunerated at up to the deposit rate.

28 In addition, the ECB Governing Council accepted that 'out' NCBs would take domestic collateral of equivalent quality as security for their own lending and said that 'in' NCBs could also accept 'out' collateral (in the UK's case, essentially gilts), for intraday payment purposes, providing that the collateral is of the same quality as ESCB eligible assets and that the risk is borne by the 'out' NCB. The best way of implementing such an approach is still under discussion.

29 The objective of the mechanism created by this package is to ensure that UK banks using the CHAPS euro system to access TARGET are encouraged to make early TARGET payments, without necessarily waiting for incoming payments from other EU systems. In addition, the package should minimise any risk of spillover. The early cut-off for the provision of credit at 5.00pm CET leaves treasurers an hour to square any short position, created for example by customer payments, and the possibility of maintaining remunerated working balances at the Bank (which the Bank in turn may keep with the ESCB) will help prevent spillover. Moreover, the large penalty on any short positions at the end of the business day will ensure that bank treasurers do not treat overdrafts in the system as the residual source of funding. There should be adequate funds available in the market and individual banks are discussing with a range of potential counterparties ways of ensuring long and short banks can find each other in the end-of-day market.

30 The Bank is keen to support the TARGET system through the direct provision of intraday credit to participants in CHAPS euro. However in practice the need for such a facility is likely to vary between banks. Many of the largest banks will have ready direct access to other sources of euro credit through their European operations. And UK-based institutions are also likely to pool their euro liquidity on their London accounts and so will have less need for credit from the Bank. But some of the smaller direct participants in CHAPS euro, with fewer sources of credit, could find the facility particularly helpful in scheduling their euro payments. The Bank will discuss with the CHAPS banks ways of allocating the available credit once the details of the mechanism have been agreed with the ECB.

EBA Clearing

31 Since the June *Practical Issues*, considerable progress has been made in developing the legal documentation that will support the EBA Clearing, which includes legal agreements with the ECB covering the status and operation of the single settlement account and of the separate €1 billion cash pool, together with the detailed clearing rules. As part of the process of ensuring adequate compliance with the Lamfalussy standards, the EBA is currently obtaining (and forwarding to the ECB for review) detailed legal opinions from every national jurisdiction represented in the clearing membership.

32 As with other systems, testing has also been a prime focus of the technical preparations. In particular, the testing of the interface between the EBA's new settlement management system and the ECB Payment Mechanism (through which the end-of-day settlement will be carried out) should soon be completed; testing of the settlement process within the framework of TARGET simulation testing has been fixed for a little later in the autumn. Contingency arrangements for the settlement process are also currently being devised.

33 At the same time as the EBA Clearing is being assessed against the Lamfalussy standards, the ECB is co-ordinating a similar assessment by the relevant home NCBs of the five domestic non-RTGS systems that will be handling large-value euro payments. It has recently been agreed that all these netting systems will close for business at the same time each day, 4.00pm CET.

B SECURITIES SETTLEMENT SYSTEMS

Standards for use in ESCB credit operations

34 The ECB has endorsed the EMI recommendation that assets included on the ESCB list of eligible collateral may be mobilised only in settlement systems or depositories that meet certain risk-related standards. Later in September, the ECB will publish a document identifying the systems which it has judged eligible, together with supporting analysis.

35 All of the 29 CSD systems, from every EU country, which have been assessed are expected to be deemed eligible for use in ESCB credit operations, although most will be used only under certain conditions. Systems which do not provide real-time payment in central bank money will be used only on a free-of-payment basis at the start of Stage 3. Other systems will be able to provide intraday finality only through the use of predeposited securities. If eligible assets are deposited with them, UK systems – CGO, CMO and CREST – will be used on a free-of-payment basis.

36 The eligible CSDs will provide NCBs with a sound, proprietary legal entitlement to the securities held with them. They will guard against settlement risk by providing intraday finality of settlement, settling any DvP transactions in central bank money, and establishing risk management procedures to cope with defaults. They will ensure that NCBs are protected from the insolvency, fraud or negligence of a depository, or of a third party appointed by it. Their operating hours and days will meet NCBs' needs in respect of TARGET, and the technical facilities will have a proven reliability and back-up capability.

37 The intention is that questions relating to the use of links between systems will be addressed in a subsequent report. As CSDs make improvements to their operations, the basis of their eligibility will be reassessed on a regular basis.

Eligible collateral for use in ESCB credit operations

38 As reported above, the ECB Governing Council decided at its July meeting to grant access to TARGET to 'out' NCBs and participants in their RTGS systems. This will be achieved by allowing 'out' NCBs to offer intraday euro liquidity to credit institutions located in their country, on the basis of a deposit in euro with the ESCB, and subject to the posting of collateral by the credit institutions with the NCB.

39 'Out' NCBs will be able to accept collateral denominated in their domestic currency as well as euro provided it meets the same standards of credit quality. So the Bank of England proposes to provide intraday euro liquidity also against gilts. The Governing Council decided that 'in' NCBs could accept these assets in their own operations with any risks borne by the 'out' NCB. The basis on which some or all 'in' NCBs will do this is still under discussion.

European Central Securities Depositories Association (ECSDA)

40 ECSDA is developing a network of links between European CSDs so as to enable the participants in any one CSD to hold a wide range of European securities and settle transactions with participants in other CSDs. During the first half of 1998, ECSDA has developed the key parts of the design of this network. These elements are the following.

- Links to support collateral management for ESCB credit and monetary policy operations; these essentially provide for free-of-payment movements of those securities that constitute Tier 1 collateral for monetary policy operations.
- Links to provide DvP for the full range of securities, including equities.
- The technical infrastructure between CSDs to support these links, consisting of the electronic message formats to be used, the procedures to be followed and the network for transmitting the messages.
- The legal agreements between the relevant CSDs.

Following approval by ECSDA's Management Committee, the working papers describing the proposed links will be published shortly. A further working group is elaborating the services that will be provided between CSDs to support holdings of instruments with more complex corporate actions, like equities. Testing will begin shortly for the first set of bilateral links which will go live in January 1999.

CMO, CGO and CREST operating days

41 Chapter 2 noted that from January 1999 CMO will run a parallel euro service alongside the present sterling operation, and that CGO will become a dual currency service allowing members to settle transactions against either sterling or euro consideration. CREST is already a multi-currency system and is introducing euro functionality.

42 CRESTCo and the Bank accept that settlement facilities against euro should be provided on all TARGET days in the interests of preserving the UK's competitive position in Europe. CRESTCo undertook research with their members in July to determine whether every TARGET day should be a CREST euro settlement day. As a result, CRESTCo have announced their intention to open for *euro* settlement on all TARGET days with effect from 4 January 1999. CRESTCo are now discussing the practical implications of this decision with the CREST registrars.

43 The Bank has also been considering with the market whether, and if so which, CMO and CGO services should open on UK Bank Holidays, given the decision that the London financial markets (and CHAPS euro) should be open for euro, but not sterling, business on all TARGET business days. The Bank's consultation has confirmed widespread demand for settlement facilities against euro consideration in both the CMO and CGO, because euro markets are expected to be quite active from the start of next year even on UK Bank Holidays, but identified little appetite for moving to a full working day in sterling.

44 Having considered the full range of possible options, the Bank has concluded the following. From 4 January 1999, both the CMO euro service and the CGO service should open on all TARGET days, including UK Bank Holidays. No problems will arise in relation to CMO, because its euro service will run separately from the sterling service (which will remain closed on all UK Bank Holidays). But, because the CGO service will be fully open, it would be possible for sterling obligations to arise within CGO on UK Bank Holidays. The Bank has proposed that these will be 'ring-fenced' in the CGO until the following day.

45 Specifically all DBVs, whether for sterling or euro consideration, would return as normal on the morning of a Bank Holiday. But members would be required immediately to re-input their returned sterling DBVs, in order to offset the sterling-assured payment obligations generated and so to leave unchanged their sterling cash position from the previous working day. (In order to facilitate the assembly of these offsetting DBVs, CGO prices on the evening before a Bank Holiday would be held unchanged from those on the previous evening.) Moreover no *new* sterling activity would be permitted on such days.

46 It is just possible that sterling trades may be wrongly input for settlement on a Bank Holiday, but any such trades would be 'ring fenced' within the CGO so that the sterling obligations arising would not be effected across CHAPS (sterling) until the day after the Bank Holiday. Any attempts to settle sterling on such days would almost certainly result from simple error: it would not be in members' interests to try to effect settlement then because sellers would be left without both the stock and cash overnight.

47 The Bank has put such a proposal to the settlement banks, which are primarily affected by this proposed approach, as the best way of securing settlement of securities trades against euro on UK Bank Holidays without infecting the sterling markets. The banks are currently considering the proposal.

48 When agreement has been reached in principle, the Bank will finalise the technical details and legal underpinning of the approach, in order to be ready for the first such Bank Holiday on 2 April 1999.

C OTHER FINANCIAL INFRASTRUCTURE

The alliance between the LSE and Deutsche Börse

49 An integrated approach for trading the most liquid (ie'blue chip') equities across Europe is made possible by the introduction of the euro; and would be facilitated by a common trading platform. Such an objective can probably only be realised through co-operation between European stock exchanges, with an alliance forming the nucleus of a pan-European market.

50 The LSE and Deutsche Börse agree on the key elements of how the new European equity market will ultimately look. This common approach led to the announcement on 7 July of the agreement between the exchanges. The key components of the agreement are as follows.

- The creation of a unified European equity capital market with a single set of rules and simplified admission procedures.
- One trading system with: a focus initially on the top 300 or so European stocks, supported by widely used indices; a single point of liquidity for European 'blue chips'; electronic, multi-currency, continuous trading; and linkages to respective settlement systems.
- Unification to be pursued through a collaborative approach, allowing other like-minded exchanges to participate on an equitable basis.
- One organisation ultimately responsible for running the market.
- Open, low-cost, access to participants from anywhere in the world.
- Added-value services for the different customer groups, principally issuers, investors and investment banks.

51 It is recognised that achievement of these objectives will be complex and can only be realised over time through a series of incremental steps.

- *Phase 1: Common access*. The focus of work in this phase will be on the provision of a common access package for the market and a single point of liquidity for the top UK and German equities.
- *Phase 2: Market convergence*. This phase will provide for convergence of market rules and conventions.
- *Phase 3: Joint markets*. This phase will see the operation of both markets on a comparable basis and preparation for Phase 4.
- *Phase 4: One operational market*. The outcome of this phase, and the culmination of work on the project, is expected to be one market operating on one system. A joint venture company owned by the participating exchanges will have responsibility for running the market.

52 The access package introduced in *Phase 1* will benefit all users by providing greater ease of access to the participating markets. Retail investors from both markets should have easier access to trade equities from the respective markets. UK and German companies will be quoted on one or the other market, to which both German and UK market participants will have access.

Eventually, the single point of liquidity will allow companies to tap a larger pool of liquidity from a single source, enhancing their capital-raising prospects.

53 The LSE and Deutsche Börse have made clear that they will welcome the participation of other exchanges in the alliance.

54 To help make the alliance a success, CREST is planning to:

- Prepare a package of measures to facilitate direct access to CREST for member firms of Deutsche Börse that wish to settle UK equity trades in this way. Not all German firms will wish to adopt this approach, but CRESTCo intends to minimise the obstacles in the way of those that do.
- Offer facilities for existing CREST members that wish to use CREST to settle their trades in German equities. This development is consistent with CRESTCo's plans to offer settlement of international securities next year and with the work of the ECSDA has been undertaking to facilitate links between CSDs. CRESTCo's preferred approach to offering its members the opportunity of settling German securities is through a direct link between CREST and Deutsche Börse Clearing (DBC).

LIFFE and LCH

55 LIFFE has appointed a new Chairman, who is currently reviewing its future strategy.

56 In response to market demand, LCH is proposing to introduce in the summer of 1999 a new OTC clearing facility ('SwapClear') for interbank interest rate swaps and FRAs. SwapClear will offer the interbank swap market a range of services which aim to increase trading opportunities by reducing credit lines, regulatory capital requirements and operating costs. The products to be cleared from the outset by SwapClear include new and outstanding interest rate swaps and FRAs which are: up to 10 years maturity; in sterling, euro, US dollars or Japanese yen; or based on major indices such as sterling LIBOR, euro LIBOR, and EURIBOR.

57 LCH has also signed an MOU with ISMA to supply central guarantee arrangements for ISMA's electronic trading system, COREDEAL. COREDEAL, which will apply to the FSA for recognition as an investment exchange, plans to begin trading in international bonds, warrants and Global Depository Receipts in June 1999.

Insurance: the London Market

58 The London Market expects that the majority of insurance and reinsurance contracts in the national currency of participating Member States will be converted into euro only at renewal or on an anniversary date, but that some contracts will be converted mid-term. To ensure a consistent approach, the various associations within Lloyd's, ILU, LIRMA and the LIBC, issued guidelines earlier in September. The primary focus of the guidelines is on the requirements of the London Market, though they are also intended to provide a framework for agreement with international markets and clients.

59 Under the guidelines, there are two key aspects to contract conversion.

- Clients may convert without insurer or reinsurer agreement. The London Market has therefore agreed that conversion does not require market authorisation or slip endorsement. Nor is there a requirement to restate contract limits or excesses in euro.
- All parties involved in the administration of a contract are to be kept informed of the contract's status. The London Market will therefore adopt a practice whereby brokers are expected to prepare a 'conversion statement' for each contract. This should demonstrate that national currency details have correctly been converted into euro.

60 Once converted, contracts are not to revert to national currency.

Information providers

61 *Common test data*. In the June *Practical Issues*, we reported that the information providers hoped to provide a common core element of test data to help market participants test for the conversion weekend. This common test universe was released on 17 August. It is supported by Bloomberg, Bridge Information Systems, Datastream/ICV, FT Information, Reuters and Telekurs. The test universe can be downloaded from the FISD website.

62 The FISD test universe has been designed to offer an additional tool to customer organisations in the run-up to the conversion weekend. It is not designed to be the only set of test data that is needed. Each of the information providers (or 'vendors') will offer a more extensive set of data tailored to the particular requirements of its user base.

63 It is possible to identify three broad areas of testing that need to be carried out prior to the conversion weekend.

- *Vendor comparison testing*. The test universe allows users to compare the approach to conversion which each of the information providers proposes to take.
- *Cross-vendor process testing*. Many businesses will use data and applications from a number of different vendors during the course of a single business process. The FISD test universe has been agreed between the leading vendors with the aim of meeting this requirement and using a common methodology for conversion. In addition, the vendors have agreed to convert test data using the rates published by Euroclear to make comparison easier.
- *Process testing*. The third and by far the most extensive need for test data is to give IT departments and end-users confidence that their processes will function in the way they expect after the conversion weekend. The FISD test universe will not itself meet this requirement. Each system and process will have differing requirements, and the test universes loaded by each vendor will consequently need to ensure that the full range of data required is available in each case.

FINANCIAL TIMES INFORMATION

The EMU test data created and converted by Financial Times Information is based on the universe of securities jointly agreed by the vendors participating in the LIBA/FISD meetings. This includes agreed fixed conversion rates for the 11 ‘in’ currencies.

A number of additional securities have been used to supplement the LIBA/FISD universe and give more examples. All securities subject to any form of euro conversion have had the relevant data converted using the fixed conversion rates.

By using these test data, users will be able to:

- test currency conversion processing based on the 11 fixed rates;
- test exchange rate processing using simulated market rates for the major ‘out’ currencies against euro;
- perform test euro-based valuations;
- test security coding administration processes;
- test capital events data arising from the euro conversion (including ‘out’ currency securities), such as: the redenomination of equities and ECU bonds; the renominalisation of equities and national currency bonds; multiple events for equities;
- test dividend payment processing in euro and/or national currency;
- test dividend yield calculations using euro prices and dividends;
- test price-earnings calculations using euro prices and earnings;
- test changes in accrued interest conventions;
- simulate their conversion weekend processing for all securities.

64 *Contributed information*. Market participants have requested details of changes to the format and layout of screens as a consequence of the introduction of the euro (see illustrations in Chart A). Whilst vendors believe that information about exchange-traded assets is relatively clear cut, they require further information about OTC instruments, which is derived from a wide range of independent contributors, before they can finalise their plans. Vendors are seeking this information through questionnaires and bilateral meetings. It is important that contributor changes, eg on composite pages, are confirmed quickly so that users viewing data can amend their displays accordingly.

65 *Historic data*. Vendors’ treatment of historic data is summarised in Table 1.

WM/REUTERS CLOSING SPOT AND FORWARD RATES

WM/Reuters closing spot and forward rates are set by The WM Company, a subsidiary of Bankers Trust Company, based on data provided by Reuters. They are used in a wide range of applications including index compilation, portfolio valuation and performance measurement.

WM/Reuters rates are currently published daily for many global currencies including all EMU participant currencies and the ECU. They are based on multi-contributor quotations close to 4.00pm UK time and, following quality control checks, are published shortly thereafter. Bid, offer and mid rates are published against GBP and USD, all rounded to four decimal places.

Service on 31 December 1998

1. WM/Reuters' rates for the euro (EUR) will be introduced for the first time on 31 December. Spot and forward rates will be published and these will be identical to the rates published on the day for the ECU. The quotation convention will be as for the ECU.
2. Rates will be calculated as normal at 4.00pm UK time and published as soon as possible thereafter.
3. It is unclear whether market quotations will be available for the EUR only, the ECU only or both, at 4.00pm. In the last case, it is not certain where the most liquid market will be. If both are available, WM will use its normal principles to select the rate(s) it believes to be most representative of the market and use these for *both* currencies.
4. Rates for the 11 'in' currencies will also be published on 31 December as normal.
5. If, as expected, the irrevocable conversion rates have been announced before 4.00pm UK time, the WM/Reuters rates for national currencies will be calculated by applying the conversion rates to the EUR rate. As at present, spot rates will be rounded to four decimal places and forward rates to five places.
6. In the unlikely event that the irrevocable conversion rates have not been confirmed and announced before 4.00pm UK time, the 31 December rates for national currencies will be based on market quotations as normal.
7. A new service will be introduced from 31 December 1998 providing quotations to EUR as a base currency. Both spot and forward rates will be published for all currencies which are not participating in EMU and will be quoted in the form of units per 1 EUR.

Service from 4 January 1999 onwards

1. Spot and forward rates for the 11 national currencies against GBP and USD will continue to be published during the transition period, to provide continuity and to ease the transition for users. The rates will be calculated from the EUR rate by applying the fixed conversion rates.
2. Rates for the ECU will also continue to be published during the transition period. These will be identical to the EUR rates.

The above statements reflect WM's current position: WM reserves the right to vary the timing and/or method of calculation as provided in its methodology should circumstances dictate. Queries or requests for further information on the methodology used in the WM service should be addressed to Brian_Dawson@wmcompany.com

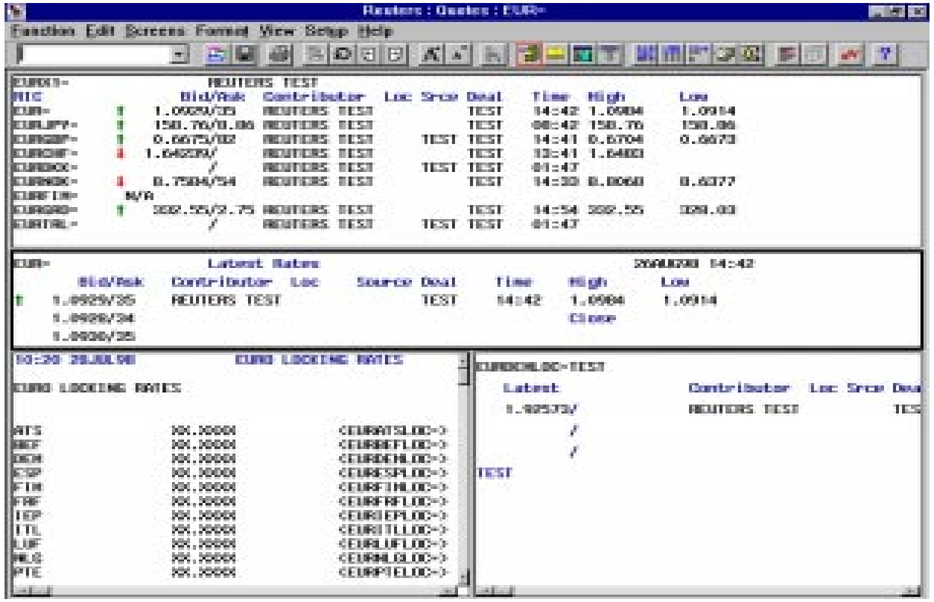
TABLE 1: PRESENTATION BY INFORMATION PROVIDERS OF HISTORIC DATA

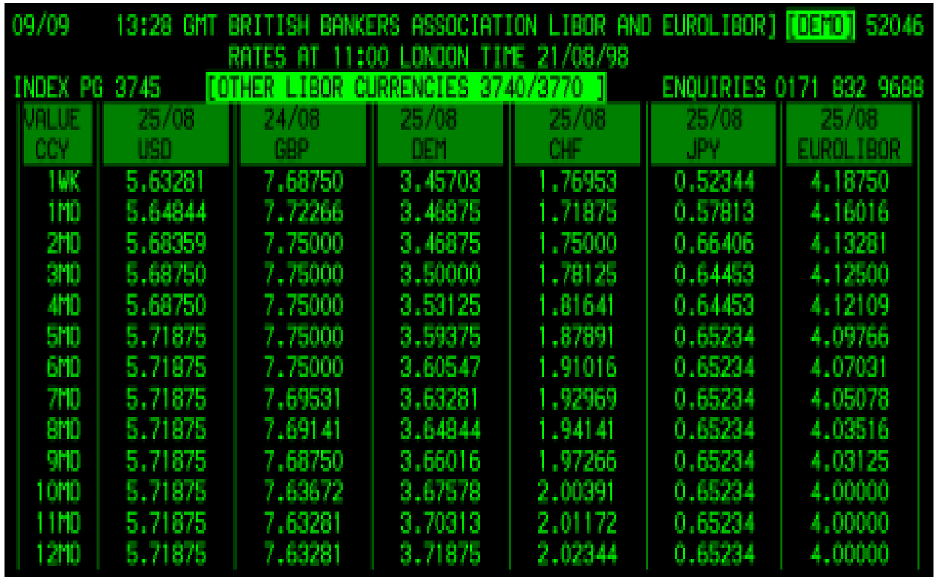
	Bloomberg[1]	Bridge[1]	Datastream		Reuters		Telekurs		Telerate (a Bridge company)[1]
	Plans	*Plans*	*Plans*	*Symbol/label*	*Plans*	*Symbol/label*	*Plans*	*Symbol/label*	*Plans*
'As reported'	Raw data held in database will remain unaltered. Historical values can be viewed 'as reported' by means of user selection within function.	Raw data provided for foreign exchange (cross-rate history and domestic currency), equities and fixed income; all via currency switch. All data prior to 1999 will be stored in raw form.	Display original national currency data	eg NC#(D:BMW) displays the original series for BMW	From 4 Jan, euro area equity prices quoted in euro. Will continue to show data in NCU for as long as practicable.	eg, BMW.F displays data in euro. NCU codes unchanged, eg DEM= . RIC codes are the same.	Quotes provided by banks/brokers will be displayed under existing valor nos/ISINs and relevant quote source description.	USD/JPY USD/EUR	Will provide 'as reported' histories for foreign exchange and fixed income.
'Adjusted'/ 'restated'	Data will be adjusted using the fixed conversion rate to generate continuous series denominated in euro (or the relevant legacy currency). This will be the standard default.	For all products, default history in euro using fixed conversion rates.	Default: national currency history restated to euro using fixed conversion rates.	Existing codes and mnemonics are used to access the default euro data, eg D:BMW – displays euro data for BMW.	Equities data will be converted from NCU to euro using fixed conversion rates. Customers can convert back to NCU using Reuters front-end applications or spreadsheets.	As above	From 1 Jan 1999 until further notice, Telekurs will calculate prices for currency pairs that no longer have market makers. Calculations will be based on fixed conversion rates of relevant currencies against euro	Price source/ stock exchange code 149	Will provide 'adjusted' histories for equities.
'Judgemental'	Users will be able to specify other customised currency conversions at the individual function level, eg DEM for Deutschemarks; or €DM for euro values generated by first translating to DM and then using the DM conversion rates. This will enable easier cross-currency comparisons.	Will provide synthetic histories for foreign exchange, equities and commodities. Bridge has elected to use the HSBC model and details will be provided for the respective products.	● Reference rate: conversion to euro via a common reference rate. ● Proxy rates: conversion to a proxy rate, eg the ECU. ● Synthetic euro rate	● ~EM after the security code: converts to euro via the DM eg F:PGT~EM converts Peugeot to euro via the DM. Reference rate codes provided for all 11 'in' currencies. ● I:FIT~CU, displays FIAT in ECU. ● A number of in-house and third-party synthetics are available: eg E0 – Datastream synthetic euro rate based on basket of 'in' currencies; E2 – FTSE International's synthetic euro.	NCU 'as reported' histories, eg DEM= , available for customers to carry out judgemental conversions or manipulation of data using Reuters front-end applications or spreadsheets. Where customers request euro history, eg EUR= for euro spot rate against USD, they will receive ECU history.	As above for NCU. Euro data available via new RICs which will follow conventions already in use.			Will provide judgemental euro/USD history up to 1 Jan 1999, which will be placed in front of the 'as reported' history from 4 Jan 1999. For equities, users will be able to apply their own judgemental algorithms to convert 'as reported' data.

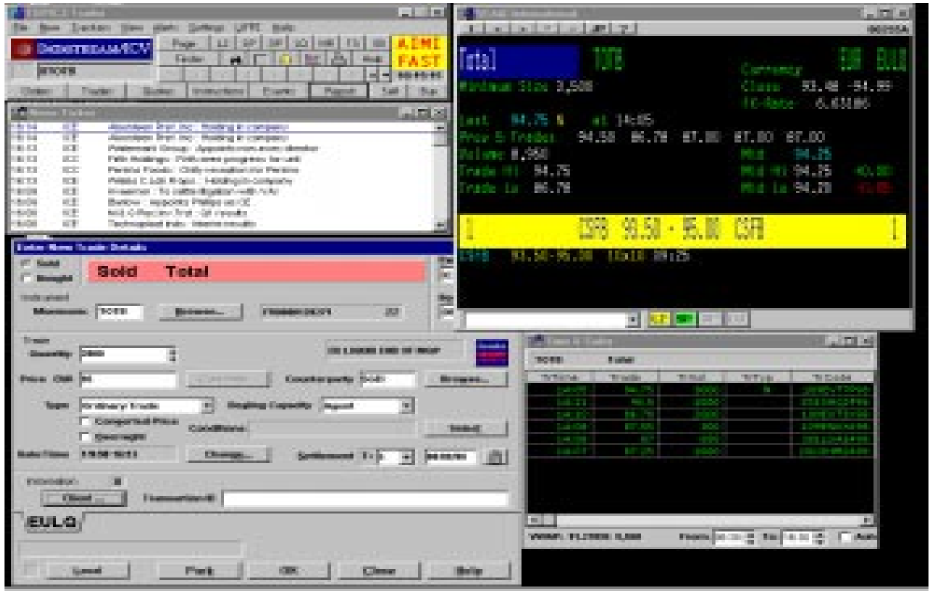
1 Details of symbols/labels not yet available.

EXAMPLES OF EURO SCREENS

CHART A







CHAPTER 5: FINANCIAL INSTITUTIONS' PREPARATIONS

1 During the summer, the Bank enquired into the state of preparedness of a sample of some three dozen major financial institutions, repeating an exercise which we conducted last year. The aims of the series of bilateral meetings were primarily:

- to find out whether each institution was on schedule in its preparations for the euro; and
- to identify the issues outside its control which had to be addressed in order for the preparations to be completed.

2 This Chapter summarises the main themes that emerged from these meetings, focusing on technical operational issues, rather than on the euro products and services that market firms will provide, which are covered in the next Chapter.

A GENERAL STATE OF PREPAREDNESS

3 The survey focused, naturally, on preparations in London. In a number of cases, firms' group-wide preparations are being integrated and led from London. Equally, in some cases preparations in London are being driven from elsewhere.

4 All the major banks and securities houses consulted remain confident that they will be able to manage successfully their workload up to and including the conversion weekend, in order to provide a wide range of euro services from 4 January 1999. However, most emphasise that a significant amount of work remains to be completed by the end of 1998, and that there is little or no scope for any slippage if their targets are to be realised.

5 There is an important caveat: namely, that the interdependence between the main players – principals, brokers, custodians, fund managers, CSDs, ICSDs and providers of services such as screen information systems and software – makes it essential for each to be fully prepared. Some of these 'external dependencies' are viewed as more risky than others, as detailed later in this Chapter.

6 The high degree of interdependence within the wholesale financial markets means that, whilst competition is right and inevitable, co-operation on infrastructure issues is essential if the market as a whole is to make successfully the changes necessitated by the introduction of the euro. Several institutions observe that perceptions of other firms' preparedness for the euro are likely to affect their decisions as to whether to do business with them and, if so, on what scale. Possible reactions mooted include drawing up lists of counterparties with which they will not trade, or requiring counterparties to sign a protocol stating their readiness for the euro. Conversely, firms which are well-prepared will be able to seize the business opportunities associated with the introduction of the euro.

7 A variety of factors helps underpin institutions' confidence that they will be ready on time for the euro. The most general of these are the following.

- *Early start to euro preparations.* Those firms where key strategic decisions were taken early are clearly best placed to respond to the challenges of the conversion weekend and beyond. Institutions which are behind schedule commonly took strategic business decisions late, or have been distracted by having to integrate systems, either internally or following a merger with another institution.
- *Clear steer from the top.* Those best prepared have clearly distinguished the technical from the strategic business aspects of their preparations. The conversion weekend is treated as a complex technical and operational challenge, but is generally seen in the context of the broad business strategy which firms will implement once the euro is launched.
- *Number and complexity of IT systems (especially new ones).* Institutions with a smaller number of different IT systems find it easier to prepare than those with many interconnecting systems. Introducing new systems may help; but it may in some cases divert resources from euro preparations.
- *Contingency planning.* This plays an important role in institutions' preparations, with some institutions having separate plans to address risks emerging prior to the conversion weekend, during it, and from 4 January. Conventional standby arrangements (against, for example, bomb damage) are distinguished from measures to cope with problems which might arise because of, say, failure of counterparties to redenominate correctly over the conversion weekend.
- *Testing and trialling.* All firms have extensive plans for testing of systems and interfaces in the coming months, which have generally been scheduled so that any corrections and adjustments deemed necessary will have adequate time to be undertaken. Testing of survival-critical systems for which no manual workarounds exist have generally been assigned the foremost priority.
- *Market activity.* Some institutions are contemplating scaling back their market activity in the run-up to the conversion weekend in order to free up resources and reduce the need for conversions. It is not yet clear what the full market consequences of such a development might be: this would depend on how many firms took such an approach and the consequent reduction in volumes involved.

B CHRONOLOGICAL LISTING OF MAIN ISSUES

8 This section considers the main issues identified in the discussions, split chronologically between those which predominantly relate to the period between now and the end of the year, those which relate to the conversion weekend itself, and those which apply after 4 January 1999. Some of these issues represent concerns about the pace or direction of preparations; whilst others are more in the nature of information gaps. The list reflects the fact that some issues which will only become operational after 4 January need to be tackled well beforehand. Many of the issues and concerns are addressed elsewhere in this edition of *Practical Issues*.

Pre-conversion weekend

9 *External dependencies*. A pervasive theme of the meetings was the need to obtain information from external sources, particularly software and information providers, and custodians, both on their euro preparations and also on how they would operate from 4 January.

Questionnaires are judged less effective than face-to-face meetings. Major institutions are generally well aware of each others' preparations, unsurprisingly given their regular close contact and the relatively advanced stage of their preparations, but they are less well-informed about the preparedness of smaller market participants (including from outside the EU) and to some extent suppliers of key systems and services. Firms are intensifying their efforts to obtain information from these two broad groups and, where satisfactory responses are not received, several intend to review the extent of their business relationship.

10 In any event, market firms are seeking to manage actively the associated risks. This means increasing their contacts with firms which have yet to make crucial deliveries of software for processing and price feeds, so as to be able to encourage timely delivery or make contingency arrangements if appropriate. We judge that those firms which are dominant suppliers to particular markets are aware of their key role in ensuring that these markets are properly prepared for the euro (see Box). Similar considerations apply to information providers, which have increasingly acknowledged their responsibility to clarify the details of the services, including screen layouts, that they will offer. Concern also focuses on the relative preparedness of sub-custodians, fund managers, and non-EU firms generally. Furthermore, reference was frequently made to Japanese firms, with some concern that initially they were not sufficiently focused on euro preparations; the concern is now more whether sufficient time is left for them to prepare adequately. Finally, many banks and securities houses have found that their clients' awareness of the implications of the euro remains at a low level, with many still considering it to be 'just another currency'.

SOFTWARE PROVIDERS' PREPARATIONS

Rolfe and Nolan

Rolfe and Nolan provides a system to support firms engaged in futures and options trading on the world's major exchanges. The main impact of EMU is that the system will have to handle the conversion of NCU contracts into euro, which will take place in different ways on different exchanges. The system supports some 25 conversion methods, covering the vast majority of the exchanges affected by EMU. Broadly, there are two main methods:

- Delete each national currency trade and insert an equivalent euro trade, at the original trade price.
- Close out each national currency trade by entering a new national currency trade, and then enter a new euro trade to reopen the position. This can be done with or without realising losses or gains outstanding on the contract.

In addition to the usual reports that the system generates, Rolfe and Nolan has developed special euro conversion reports to allow back offices to check the conversion process. It is also developing new report formats to allow users to communicate the results of conversion to their clients. These will be available in October. The system's euro-related modifications were delivered in late August and are now being tested by clients. Rolfe and Nolan will be providing full client support throughout the period up to, and including, the conversion weekend.

Nomura Research Institute

Through its I-STAR system, Nomura Research Institute provides middle- and back-office processing facilities to some 50 foreign securities houses in Japan, as well as to securities subsidiaries of Japanese commercial banks. I-STAR's functions include settlement and clearing, financial accounting and regulatory reporting for European derivatives and securities.

After consulting firms in Europe about the impact of the conversion weekend on its Japanese operations, NRI has held user group meetings in Japan to discuss the system enhancements it is planning. These will be introduced in two phases. The first, which begins on 2 October, includes introducing the euro as a system currency, entering information on redenomination into securities master files and creating new report types relating to redenomination. The second, beginning on 13 November, includes modifications to allow the system to handle fractional amounts of security nominal. A full conversion weekend dress-rehearsal is planned for the end of November, and will be followed by others if necessary.

PricewaterhouseCoopers

SECAM+ is a reporting package which enables SFA regulated firms to calculate and report their capital requirement under the EU Capital Adequacy Directive.

A new version of SECAM+ implements a number of regulatory changes arising from EMU, the major impact being on the treatment of fixed income and foreign exchange positions in participating currencies. It has also led to the introduction of a 'group currency' to which a number of currencies may belong. This concept has been the most complex change to the system. Substantial effort has been devoted to testing of the software. SECAM+ allows users to switch EMU on or off for testing purposes, so that they can check before-and-after scenarios well in advance of the conversion weekend.

Development of the EMU version began almost a year ago, when the SFA first provided members with guidance on dealing with the impact of the euro. A discussion paper in November 1997 was followed by a number of workshops held in February, April and July 1998, designed to allow users to contribute as much as possible in the project's design phase. Early versions of the EMU software were released to test sites in July and August 1998. Feedback from the test sites is being incorporated into the final release of software, which is scheduled for the end of September 1998.

SunGard Futures Systems

SunGard Futures Systems supplies back-office accounting software for the exchange traded derivatives and equities markets. The system can handle the addition of the euro as a new currency relatively easily. The bulk of the changes it requires relate to the large number of products traded on European exchanges that will be redenominated over the conversion weekend. Exchanges have set out their own redenomination rules, so that there are many different redenomination methods applying to different products. SunGard has developed a set of tools to automate the conversion of cash and open positions over the weekend, and the handling of national currencies throughout the transition period.

The distribution of the new software began in May, and is now over 95% complete. The next step is for customers to test it using test data files that the exchanges will provide. The software required to perform a full system test, as well as testing with other applications, has already been delivered. From now until the conversion weekend, SunGard will help customers with the testing process, offer them training, and make any minor necessary changes to the software.

11 *SSIs.* Many firms stressed how important it was to meet the recommended 30 September deadline for submitting SSIs, and expressed concern that many institutions might not do so. This would risk creating problems subsequently with reconciliations next January. This message is just as important for firms operating outside the EU, which will be no less affected if payments were to go astray after the conversion weekend. In response to these concerns, the Bank has continued to reiterate the importance of respecting the 30 September deadline.

12 *Competition with Year 2000 preparations.* Whilst it is recognised that regulators in the USA and UK have set end-1998 as an important staging post in relation to Year 2000 compliance for financial institutions, there is concern that some groups, for example small UK banks and building societies as well as non-EU institutions, may be focusing on Year 2000 preparations to the detriment of euro preparations. Conversely, a number of small and medium-sized banks from other EU countries may be neglecting the Year 2000 challenge in favour of their euro preparations.

13 *Testing.* Most institutions plan extensive system testing, including of volumes, in the period leading up to the conversion weekend. Several emphasise that this will encompass procedures for the weekend itself and for 4 January and thereafter, as well as their interfaces with clients and counterparties. Institutions will concentrate on testing their most important systems and consider it essential that a realistic approach to the amount of counterparty testing that is possible is taken by all market participants.

14 Institutions participating in CSDs or ICSDs intend to take part in market tests in the countries in which they operate, on the basis of 'snapshots' of data from the close of business on certain agreed dates in each market. However, concerns were expressed that not all testing dates, and other important details of the tests, such as the exchange rates to be used, had been finally confirmed. Firms also expressed concern over the lack of information on arrangements for testing at certain futures exchanges, including in Portugal and Spain. (It is likely that the information exists but has not been widely disseminated.) Although there were some suggestions that there should also be more co-ordinated market-wide testing, this did not seem to be a commonly held view. Most institutions agreed that, although this would be desirable in principle, in practice there was insufficient time to complete it. Indeed, test schedules are already tight and institutions urge the authorities not to propose any more mandatory testing.

15 It is recognised that testing is subject to several limitations. For example, client testing may reveal whether an institution's interface with its client works, but not whether the latter's internal systems are working satisfactorily. Neither can it offer the comfort provided by successful operations in a live environment.

16 *Redenomination and reconventioning.* Final confirmation of the details of how and when redenomination and any reconventioning will occur is lacking in numerous cases. It would be very helpful if the list of any corporate issues to be redenominated over the conversion weekend could be finalised and made known by mid-October, but this may regrettably simply be unrealistic. It is already too late for certain institutions to accommodate further debt reconventioning. Our up-to-date information is included in Chapter 2 and continuously updated on the Bank's website. Information on individual securities is available on the websites of DBC, Euroclear, Sicovam, Paribas and Reuters (see address list on page 118). Particular concern is expressed about a lack of complete information on German corporate bonds; but since only four weeks' notice of redenomination is required, it will not finally be clear until November how many issues will be redenominated over the conversion weekend. Full details will be found on DBC's website.

17 There is uncertainty regarding the legal arrangements in some countries for the redenomination of equities, in particular for no par value shares, and for rounding differences.

18 Firms expressed a need for final decisions and clear detailed guidelines, both from other Member States and other jurisdictions (including the USA), on the tax treatment of redenomination, for example on the precise circumstances in which redenomination will be tax-neutral; and on the tax treatment of cash payouts arising from redenomination. (Some information on EU countries is available from the FEE survey referred to in Chapter 8 of this *Practical Issues*; and precise details of the Inland Revenue's intentions appear in the same Chapter.)

19 Clarity is sought regarding 'in' governments' issuing intentions in 1999, and confirmation that reconventioning will not take place between coupon dates.

20 *Payment systems.* Information is still needed on whether certain payment and settlement systems will be open on national bank holidays, and if so, what their opening hours will be, what happens if a bank is wrongly credited via TARGET on a national bank holiday, what 'open for business' means for banks in different countries, and whether TARGET business days will be accounting business days in all Member States. In this connection, the EBF has circulated a questionnaire prepared by ISDA and the BBA.

21 Notwithstanding the decisions reached by the ECB Governing Council in July, details are awaited on the precise terms of access by 'outs' to intraday liquidity in TARGET. In addition, questions have been raised about how in practice the 4.00pm cut-off for customers' payments in CHAPS euro will be monitored.

22 Hopes were expressed that the ECB would provide further detailed information soon on TARGET; on the precise Tier 1 and Tier 2 lists of eligible collateral; and on its understanding of the national holiday position around the euro area for payment and settlement systems and exchanges.

23 *Reporting requirements.* It is also important that any additional reporting requirements to be imposed by the Bank and ECB are made known as soon as possible. (The Bank's reporting requirements *have* been finalised; discussions are still continuing in the ECB about reporting requirements for 'in' financial institutions.)

24 *Activity levels.* It is recognised that the volume of the trades they undertake around the weekend, especially those straddling it, could affect directly the performance of institutions in meeting their conversion weekend targets. Several intend to do little proprietary business and hope that trading volumes will be low. However, it will be impossible for institutions to control client trading, and the foreign exchange markets are expected to remain active. Moreover, institutions may themselves wish to exploit the trading opportunities created by other market participants seeking to offload securities in national currency, so as to avoid having to convert them over the weekend. It is noted that an increase in business which merely increases *holdings* of securities immediately in advance of the weekend, but not trades which have to be *matched* over the weekend, is likely to be manageable.

The conversion weekend

25 *General.* All institutions are well aware of the importance of their work over the conversion weekend, the scale of which is increased in some cases by its coinciding with their financial year-end. Most are seeking to reduce their workload over the weekend itself by undertaking as much as possible beforehand, or, where it is not absolutely necessary to complete tasks by 4 January, by scheduling them after that date. For example, as implied by the SSI deadline, many banks are already opening euro accounts for their customers, which will become active on 4 January 1999; whilst, on the other hand, nostro account consolidation will in most cases be delayed until some time into the transition period. It is likely that some market participants will seek to reduce their workload by reducing the number of trades straddling the weekend, and closing out derivative trades for which there is no economic rationale, provided that tax and accounting considerations do not militate against this.

26 Over the weekend, nearly all institutions plan to follow at least hour-by-hour schedules which identify which tasks must be performed by when. Considerable thought has been given to ensuring that key personnel are available throughout the weekend. This has meant making the necessary transport, accommodation, and logistical arrangements.

27 *Events on 31 December.* There is a common view that definitive euro conversion rates, accurate to all six significant figures, must be published in the early afternoon of 31 December in order to allow the conversion process proper to begin as soon as possible. It is stressed that there must be no possibility whatsoever that these rates will be subsequently revised. (The hope is that an official timetable for the weekend, showing when key announcements will be made, and where, will be released soon.) This point is well understood by the authorities. They intend to make the euro conversion rates available in the early afternoon (CET), and that they will at this point be definitive, even though they may not receive formal legal ratification until midnight. A formal announcement of the precise arrangements is expected following the Informal ECOFIN to be held in Vienna in late September.

28 There is widespread agreement that it would be helpful if trading could be minimised on 31 December (whilst settlement and payment systems should remain open for the settlement of as much outstanding national currency business as possible). Moreover, firms which operate in New York and Tokyo observe that the window between 31 December and 4 January is less than for other institutions, on account of time differences.

29 *Over the weekend.* In addition to firms establishing their own internal 'milestones' for monitoring their progress over the conversion weekend, there is a strong demand for an easily accessible information source on where the main players stand in relation to their conversion weekend plans. Unless an efficient conduit for reliable information of this sort can be provided, it is possible that there will be an inordinate number of bilateral telephone calls and telexes, which could divert key personnel from the conversion process. It may well be possible (see Chapter 2) to avoid this by agreeing on comparable milestones for monitoring progress, ensuring that firms provide accurate information on whether they have passed them or not (perhaps by involving the regulators), and deciding how it may be disseminated.

30 It is considered essential that all entities involved over the weekend – including S.W.I.F.T., payment systems, ICSDs, CSDs, and exchanges, as well as market participants – have senior personnel on hand throughout the weekend who have the authority to take key decisions quickly. It was suggested that institutions should make known the names and contact details of relevant staff whom other market participants could contact over the weekend should the need arise. The Bank is pursuing this idea.

31 Most institutions have contingency plans against the possibility of their own internal systems crashing for whatever reason. In addition, there is a desire for market-wide contingency plans to be formulated. It was noted that regulators and central banks would need to be aware of the risks surrounding the conversion weekend. They would need to ensure they could communicate effectively should a market-wide problem develop, and should be clear in advance where responsibility lies for responding to the various kinds of difficulties that could arise. These points are addressed in Chapter 2.

32 Finally, the appropriate authorities have a role in ensuring that the key public services, including electricity and transport, are provided to the main financial centres, and also locations where institutions maintain back-up contingency sites, over the conversion weekend. In this connection, the City Corporation is in touch with the relevant utility providers to ensure that they are fully aware of the importance of avoiding disruption over the conversion weekend. In addition, the Bank's Agents are drawing the same concerns to the attention of relevant authorities in other UK financial centres.

Post-conversion weekend

33 *Market issues.* It is expected that problems over the weekend could lead to a contraction in the stock lending/repo market (with deals done in late-1998 for settlement in 1999 most at risk); nostros being incorrectly credited or debited; inconsistent ways of dealing with fractional amounts of security nominal; and incomplete reconciliations, all leading possibly to an increased number of failed trades. Resolving the problems resulting from an increased number of fails could place sizeable demands on back offices in the first quarter of 1999, and it is important that market participants are staffed to deal with this. It has also been suggested that authorities might consider providing an arbitration service to deal with the increased number of disputes that could well follow the expected rise in failed trades. It may be possible to conceal back-office problems over the weekend, but not by the end of the first week of 1999, when the settlement backlog will become obvious.

34 Some institutions can envisage situations in which euro liquidity support might be necessary, possibly via reverse repos, if available collateral cannot be utilised. However, most consider that such a situation is unlikely to be necessary, provided that a sufficient number of institutions have arranged credit lines to deal with such a situation. The market itself should then be able to deal with any localised liquidity shortages.

35 *Payment arrangements.* Most institutions envisage that they will operate on a dual-currency basis, rather than immediately conduct all of their formerly national currency business in euro, from the beginning of 1999. This strategy reflects in part the feedback that they have obtained from their counterparties and clients.

36 Gauging the scale of future demand for euro payments (and indeed other euro services), especially that of UK corporates, is recognised as highly uncertain. In order to ascertain customers' views, certain institutions have sought first to raise customer awareness of the euro, and envisage retaining a team to advise customers in the first half of 1999. One problem that some banks face is how best to assess and thus meet UK corporates' demand for euro services without giving the impression to their personal and SME customers that they too will have automatic access to such services in early 1999, since widespread demand from them could simply not be met at that stage.

37 Most banks intend to maintain their network of national currency nostro accounts, at least for the first few months of 1999, while opening a single euro nostro. This strategy is seen to provide more flexibility in meeting the needs of clients and counterparties, than that of eliminating national currency nostros immediately the euro is introduced.

38 It is generally expected that the need for operational efficiency, including in relation to liquidity management, will eventually lead to different types of payment migrating to particular systems. Price will be a key driver and relative risk is viewed as less important, certainly in comparing the EBA to RTGS systems. However, it remains uncertain which systems will be chosen and when. One unknown determining factor is the manner in which individual systems will cope with the volume of payment traffic directed towards them in a live environment. Against this background, most banks have elected to connect to a variety of systems, notwithstanding the additional collateral, and liquidity management, costs associated with such a strategy. At least one securities house has stipulated that it will not accept different transaction fees depending on which payment system its clearer uses.

39 *Framework for quotation of the euro.* Several institutions expect that the market will initially be split as regards the way in which it quotes the euro against sterling and the dollar. They are unclear as to whether the 'official' convention of quoting the latter against one euro will eventually prevail or not, and concerned that there will be confusion while both conventions are used simultaneously, especially if the values of the euro and dollar are close to one another. They consider it vital that all foreign exchange market participants are aware of this ambiguity, especially small players outside the EU. It is likely to be a short-lived problem since the market is likely to move over very quickly to one of these two options (see Chapter 2).

CHAPTER 6: EURO MARKET SERVICES IN LONDON

Introduction

1 The focus of this Chapter is on the euro products and services that market firms will provide in wholesale financial markets in London from 4 January 1999 in order to meet the *changes* in the marketplace that the euro will bring. The Chapter does not attempt to give a comprehensive account of the euro services that market firms will provide. In general, where market firms provide services in participating national currencies at present, they will continue to provide them in euro. In addition, the Chapter is solely concerned with services in the euro markets after the changeover to the euro. It is not concerned with changes in the financial infrastructure or the services that market firms provide to their clients as ‘conversion agents’ to help them change over to the euro. The changeover in wholesale financial markets is discussed in detail elsewhere in *Practical Issues*. All major market firms in London are aware of the importance for their competitiveness of being well prepared for the introduction of the euro, despite the costs.

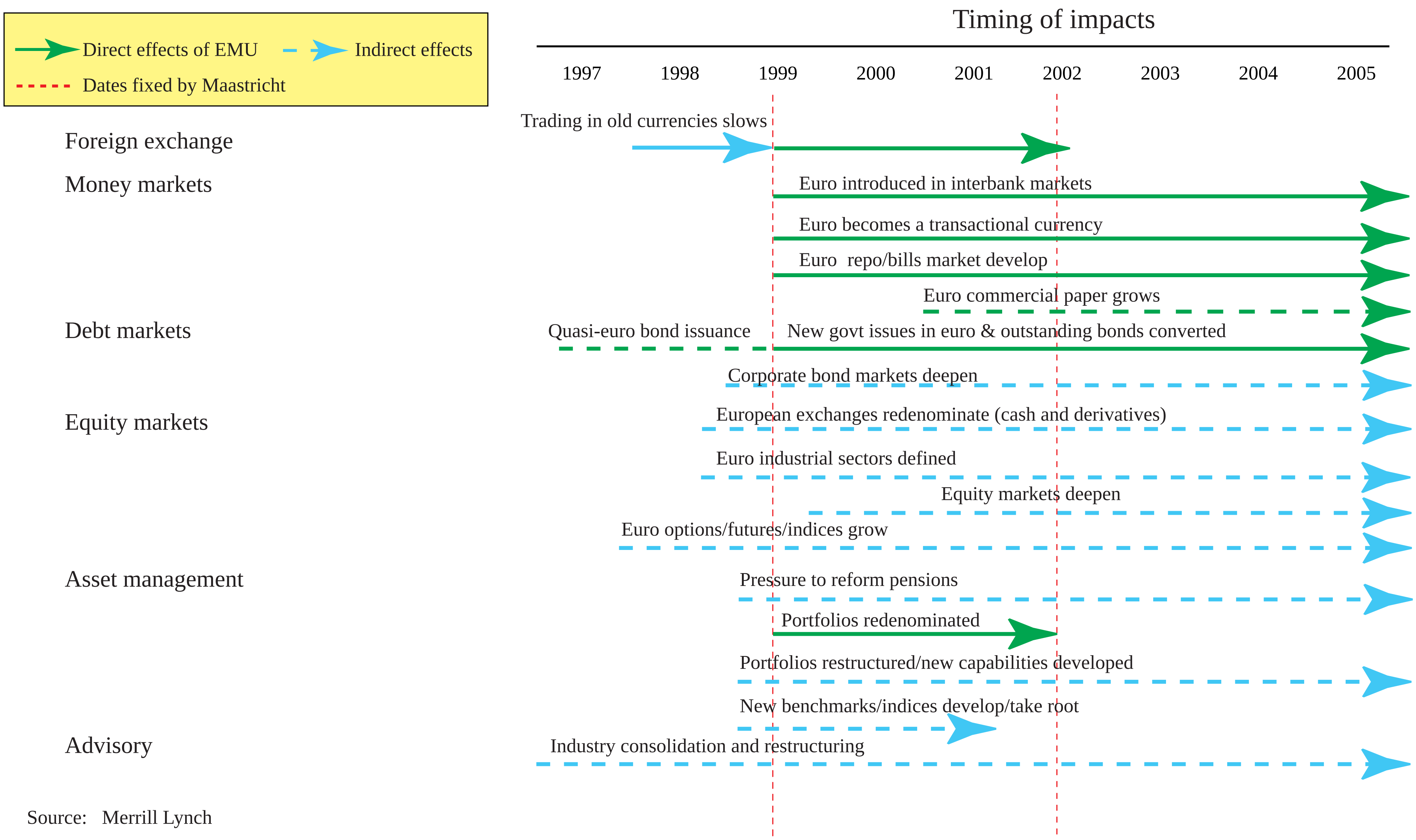
2 The Chapter draws on contributions from a number of major market firms in London, and is illustrated by charts which they have provided. The market firms concerned are identified at the end of the Chapter. Clearly, different market firms have different views and focus on different areas of the market. This account attempts to summarise common patterns and trends. It does not attempt to describe each individual case. While the market judgments made are based on the views of one or more of the firms consulted, the market is competitive and they do not all necessarily agree. On the other hand, firms beyond those listed would no doubt share many of the views expressed.

3 The introduction of the euro has long been anticipated, and the changes brought by the euro to wholesale financial markets have already begun. Market firms are adjusting the services they provide to accommodate them. Some of the changes are expected to take place very quickly after the euro is introduced. Others will take time to develop (see Chart A). In many cases, EMU is the catalyst, though the changes cannot all be attributed to EMU: global competition, technological change, deregulation, and consolidation in the financial services industry are important factors as well. While the changes described in the Chapter are expected, none of them is certain. The euro is an unprecedented development for market firms. When the euro is introduced, national restrictions will still exist in the euro area. They will impede the integration of euro capital markets until they are removed. And there is also an unusually high level of uncertainty about general economic prospects in Europe as a result of the deterioration in the global financial environment following the problems in South East Asia, Russia and elsewhere.

4 Many market firms have reviewed their *organisational structure* in anticipation of the introduction of the euro. Some have implemented a ‘hub and spokes’ structure, with the core of their business, including trading and risk management activities, concentrated in key locations like London, where the most liquid markets are themselves located, but with sales and marketing teams located as close to the client as possible. They consider that an organisational structure of this kind puts them in the best position to take advantage of the opportunities that the euro will bring (eg in terms of economies of scale), while recognising that different customers will change over to the euro at different times and be affected by its introduction in different ways. They

TIMING OF THE IMPACT OF THE EURO ON FINANCIAL MARKETS

CHART A



Source: Merrill Lynch

have in many cases already adjusted for the more obvious costs associated with the euro, such as the loss of intra-EMU foreign exchange trading (which has represented a very small market share of foreign exchange trading in London), the consolidation of futures contracts and the reduction in the scope for 'plain vanilla' corporate banking. All market firms expect the euro to bring an increase in competition more generally.

Money, foreign exchange and banking

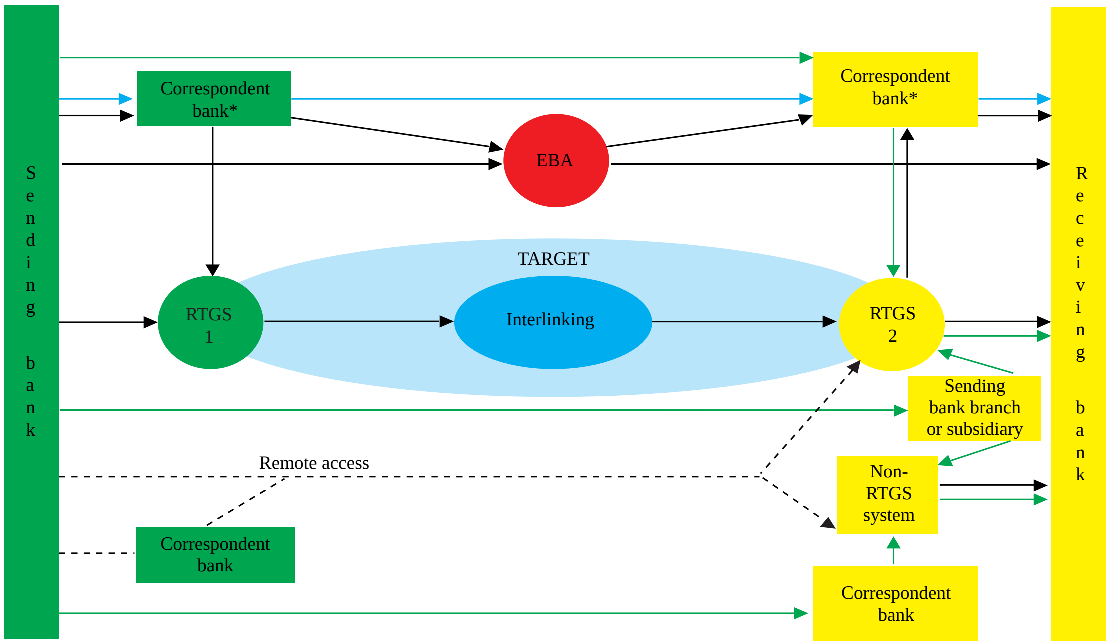
5 *Treasury* services in the euro money and foreign exchange markets and *trade* services are expected to continue to take much the same form in euro as they do in participating currencies at present. The difference will be in the depth and liquidity of the euro cash markets and associated derivatives, with foreign exchange trading focused in particular on the euro against the dollar, and to some extent against sterling and the yen. There will be a liquid euro interbank market in London, with bank loans, FRNs, swaps and other derivatives priced (eg) on the basis of euro LIBOR. Within the euro area, national repo markets are expected to remain distinct for the time being, owing to legal and tax differences and incomplete links between CSDs. But a pan-European euro repo market may nevertheless develop in London, based on PSA/ISMA documentation, English law and access to a wide pool of euro securities through the ICSDs. A number of standard categories of euro securities to act as general collateral in the repo market may need to be defined, so that trading can occur on a consistent basis and liquidity can develop.

6 Market firms anticipate that increased competition will gradually erode traditional *banking* relationships between corporates and their 'house' banks, as 'house' banks will no longer have the ability to offer 'cheap' local funding. The other prospective changes that the euro will bring for corporate treasurers include: the elimination of foreign exchange risk within the euro area; more transparent pricing; a reduction in transaction charges, though cross-border charges may not be as low as domestic charges; the ability to rationalise accounts and centralise treasury management. But some national legal, tax and regulatory differences will remain.

7 Market firms providing *euro clearing services* expect their customers to require:

- *Account services*: the ability to open a single euro account or a number of euro accounts in a range of financial centres, and maintain national currency accounts during the transition period, with conversion between euro and national currency at the conversion rate being carried out with no additional charge; the opportunity to consolidate nostro accounts on a smaller number of key suppliers; and the efficient delivery of account information, including statements.
- *Payment services*: the ability to clear all euro transactions from a single euro account, whatever their ultimate destination; the ability to make or receive euro payments to or from euro accounts or accounts denominated in any other currency; the ability to make or receive national currency payments to or from a euro account, with conversion at no additional charge; the execution of real-time payments with immediate finality, where required; cost-effective same day value and forward-dated payments across Europe, even though standard settlement in the euro foreign exchange market will continue to be for spot value; the management of 'pipeline payments' to be made or received on a range of future dates; and links to a wide range of clearing systems as a contingency.

ALTERNATIVE CROSS-BORDER EURO PAYMENT ROUTES — CHART B

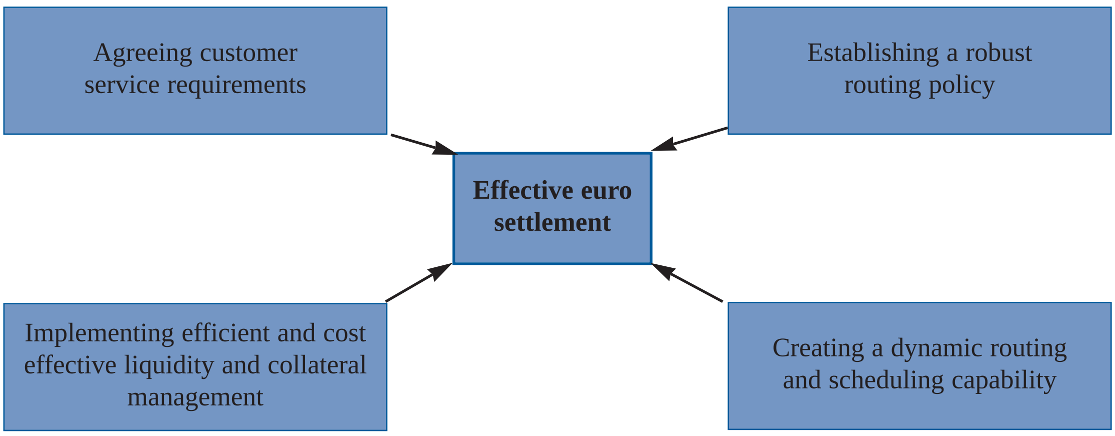


* A sending/receiving bank which is not a direct member of a payment system will need to use a correspondent which is a direct member.
Source: HSBC

- *Electronic information delivery*: the continued use of existing delivery channels via S.W.I.F.T. and electronic banking; the improvement of reporting facilities via S.W.I.F.T. and the internet, including intraday; and high security standards.
- *Service quality*: high standards of customer service, including quick and efficient query resolution; published service level agreements and nominated points of contact; and very high rates of 'straight-through processing'.

8 *Effective euro settlement* will be particularly important. From 4 January 1999, there will be a choice of up to 30 different euro payment systems. With so much choice, settlement banks offering euro services must be able to manage their intraday liquidity in the most efficient and cost-effective manner, and must have the capability dynamically to route and schedule payments over the available systems in order to meet the particular service required by each customer.

EFFECTIVE EURO SETTLEMENT — CHART C



Source: Barclays

9 Market firms providing euro *cash management* services expect to offer pooling and sweeping services to corporate treasurers with activities across the euro area, taking into account legal, tax and regulatory constraints which will still exist in individual countries after the single currency is introduced.

- *Pooling* enables an account holder's credit and debit balances denominated in euro and national currency to be notionally offset for the purposes of calculating interest, so as to maximise liquidity without transferring funds.
- *Sweeping* involves transferring funds between different accounts denominated in euro and national currency into a single euro account, so as to give the account holder more flexibility in handling cash flows. Sweeps can be carried out domestically or cross-border. If they are carried out cross-border and for same day value, sweep times may have to be aligned with the cut-off times in the markets concerned.

10 Many market firms expect that the euro will also generate increased demand for *collateral management* services, in which custodians will:

- offer a range of techniques for mobilising collateral across borders, such as: making loans in one location against collateral pledged in another; lending securities in one CSD against collateral pledged in another; acting as a repo counterparty, with the cash and securities legs of the repo taking place in different countries; and matching counterparties in different countries wishing to undertake opposite sides of these transactions;
- monitor and report their cash and securities positions, and pending transactions, in different locations across Europe; and identify potential local cash or collateral shortages, or impending failed transactions.

Debt capital markets

11 The euro *government* bond market will be one of the largest in the world, with a market capitalisation of around $2,000 billion (ie around 80% of the market capitalisation of the US Treasury market). The largest shares of the market are represented by Germany (26%), France (23%) and Italy (21%).

Market capitalisation of the euro government bond market

$bn Jan 1998	*Austria*	*Belgium*	*France*	*Germany*	*Italy*	*Netherlands*	*Spain*
1-3 year	14.6	30.2	97.2	132.4	117.3	42.1	36.7
3-7 year	27.9	60.6	152.7	230.0	172.2	60.9	75.7
7-11 year	12.3	47.8	128.0	93.5	78.9	58.0	42.6
11+ year	1.3	11.1	61.0	24.8	30.9	14.4	15.6
Total	56.1	149.7	438.9	480.7	399.3	175.4	170.6
Duration	4.2	4.7	5.3	4.3	4.2	4.9	4.1

Source: Goldman Sachs

12 Assessment of *sovereign credit* risk will change as a result of EMU, because: participating governments will no longer be responsible for issuing their own currency; they will be subject to the budgetary constraints of the Stability and Growth Pact; and there is a 'no bail-out' clause (Article 104b) in the Maastricht Treaty. Article 104 also prohibits the ESCB from extending overdraft facilities to governments and from buying government debt in the primary market. In response, sovereign local and foreign currency ratings are expected to converge on a set of ratings which distinguish between the creditworthiness of different sovereign borrowers in the euro area. The distinction will be reinforced by sovereign borrowers being less able to rely - following the lifting of investment restrictions and the ending of currency risk - on investors buying their own government's bonds.

Current sovereign rating of governments in the euro area

	Moody's		*S&P*		*Fitch-IBCA*	
	Foreign	*Local*	*Foreign*	*Local*	*Foreign*	*Local*
Germany	Aaa	Aaa	AAA	AAA	AAA	AAA
France	Aaa	Aaa	AAA	AAA	AAA	AAA
Luxembourg	Aaa	--	AAA	AAA	AAA	AAA
Netherlands	Aaa	--	AAA	AAA	AAA	AAA
Austria	Aaa	Aaa	AAA	AAA	AAA	AAA
Belgium	Aa1	Aa1	AA+	AA+	AA+	AAA
Ireland	Aa1	Aaa	AA+	AA+	AA+	AAA
Finland	Aa1	Aaa	AA	AA	AAA	AAA
Spain	Aa2	Aa2	AA	AA	AA	AAA
Portugal	Aa3	Aa2	AA-	AA-	AA	AAA
Italy	Aa3	Aa3	AA	AA	AA-	AAA

Note: The ECB will be rated 'AAA'.

13 There is not expected to be any co-ordination in either the timing or method of bond *issuance* between governments in the euro area, though IPMA has suggested that government issuers in euro should publish planned issuance calendars jointly on a voluntary and non-binding basis. Market firms expect that smaller governments will in practice fit their issuance programmes around those of Germany, France and Italy. They also consider that it would make sense for smaller government issuers to concentrate their issuance at certain points in the yield curve to build up liquidity rather than making small, and therefore relatively illiquid, issues along the full length of the yield curve.

14 Market firms are clear that only the market can decide on the euro *benchmark* yield curve, but they are still unclear what it will be. The main options appear to be the French or German governments, some combination of both, or the swaps curve.

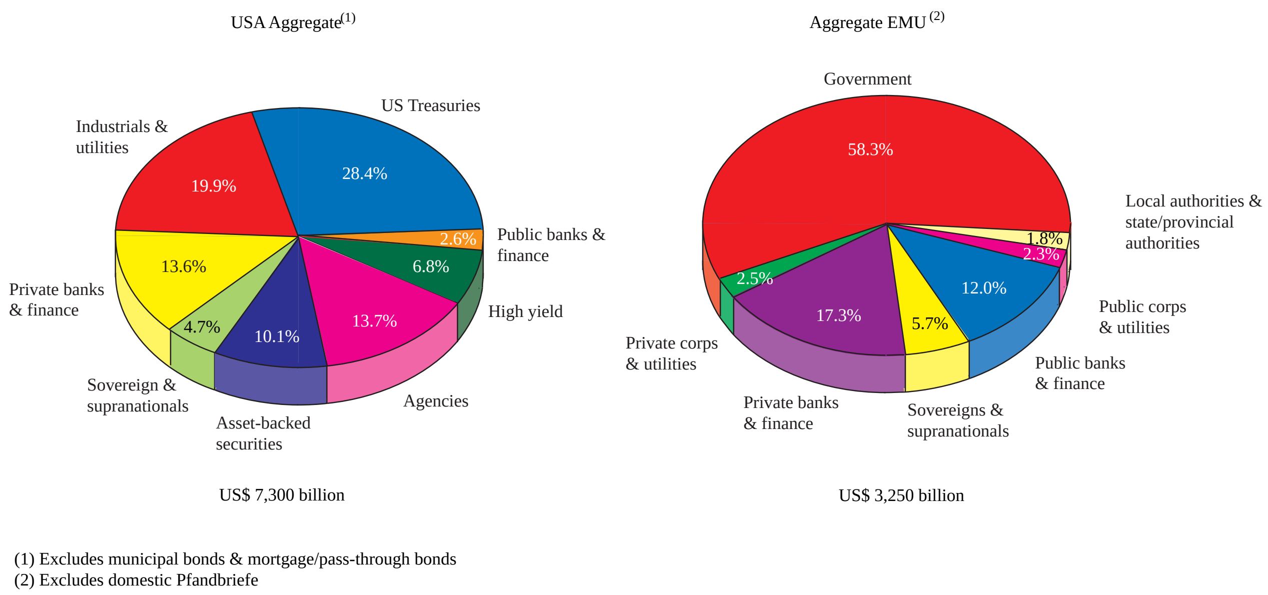
- France has a transparent system of issuance, a developed repo market and is increasing the range of investment instruments through the issue of index-linked bonds.
- Germany is currently the benchmark issuer in Europe, as the financial consequences of recent developments in Russia have confirmed. Its benchmark status shows up in investment patterns, with almost half of the stock of marketable German government debt held outside Germany compared with only 10% for France, and in trading volumes, with volumes in German government debt outweighing those in the French government market.

- A third possibility is that the benchmark yield curve could be some combination of French and German government debt, with each issuer acting as benchmark in a segment of the yield curve. But this could lead to fluctuations in the shape of the yield curve caused by shifts in the relative creditworthiness of the two issuers.
- In these circumstances, a fourth possibility is that the swaps curve could emerge as the benchmark. It shows for each maturity the fixed interest rate at which banks can receive euro funds in exchange for floating rate euro payments, and depends on the creditworthiness of high-quality banks generally, rather than a particular issuer. But since it reflects the cost of funds to banks rather than governments, it may be less suitable where a benchmark of government quality is needed.

15 Market firms expect that EMU will lead to a significant increase in the demand for *corporate* and municipal bonds from investors, and the supply of corporate and municipal bonds by issuers, though the timing of this change will of course be affected by global market conditions:

- The demand for corporate debt is expected to increase as it provides higher yields than the historically low yields currently available on government debt. Corporate credit ratings in euro will no longer be constrained by the credit ratings of their own governments, and there will be limits on the availability of government debt under the Fiscal Stability and Growth Pact. The growth in the funds available for investment by pension funds, insurance companies and unit trusts also constitutes a potential source of demand.
- The supply of corporate debt is expected to increase as the costs of issuance fall. The combination of a deeper and more liquid market as a result of the introduction of the euro, credit diversification by investors and competition among market firms should drive the relative costs of corporate borrowing lower. In response, the distribution of debt by borrower in the euro area is expected to become closer to the current position in the USA (see Chart D).

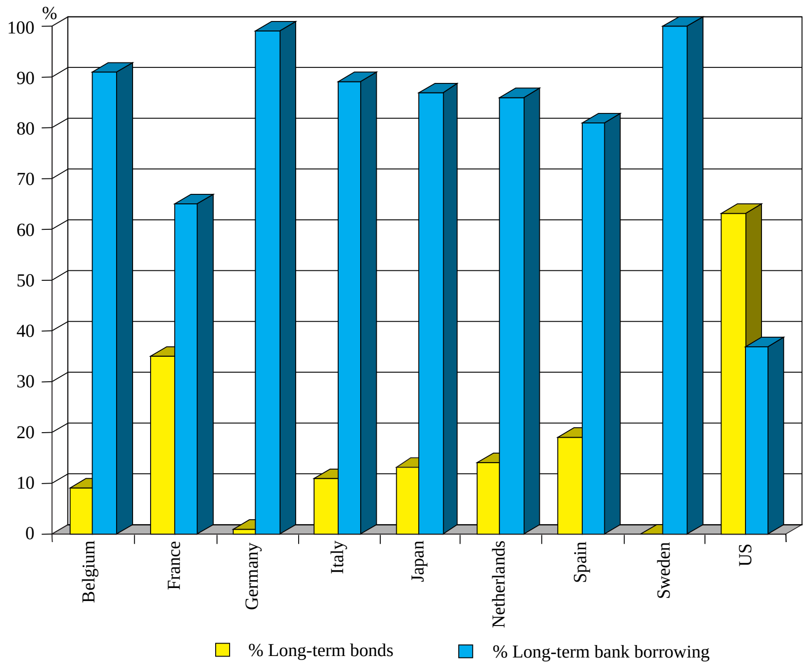
TYPES OF ISSUER IN USA AND THE EURO AREA **CHART D**



Source: Morgan Stanley Dean Witter

16 In the euro area, corporates currently borrow on average significantly more from banks than through bond issuance, whereas the position in the USA is the other way round (Chart E).

CORPORATE BORROWING IN EUROPE, THE USA AND JAPAN CHART E



Source: Deutsche Bank

17 The intermediation of savings through the banking system in the euro area is currently high in comparison with the USA (20%), though it ranges from over 80% in Italy, and over 70% in Spain, France and Germany, to just over 50% in the Netherlands. Market firms expect the pace of *disintermediation* away from the banking system in Europe to quicken in two complementary ways:

- On the asset side of the banks' balance-sheet, disintermediation is expected to be driven by the replacement of bank loans by bond issues, in response to deeper and more liquid euro capital markets.
- On the liability side, disintermediation is expected to be driven by a shift in savings from bank deposits to bonds, equities and investment funds, in response to demographic changes, pension reforms, and deregulation allowing financial institutions to undertake a wider range of activities.

18 Market firms expect the development of the corporate bond market to support growth in asset-backed securitisation, commercial paper and credit derivatives. *Asset-backed securitisation* arises from the need for asset owners, particularly banks, to free up capital in response, for example, to pressure from regulators for higher capital standards and pressure from shareholders for banks to increase their return on equity. One route to higher returns on equity is for banks to securitise parts of their loan portfolios (eg mortgages, consumer loans and credit card receivables). This frees up capital for more profitable investment. Consequently, the market is expected to be dominated by large commercial banks with significant loan books. But the growth in the market EU-wide does depend on a degree of harmonisation of different EU legal and regulatory requirements and market practices.

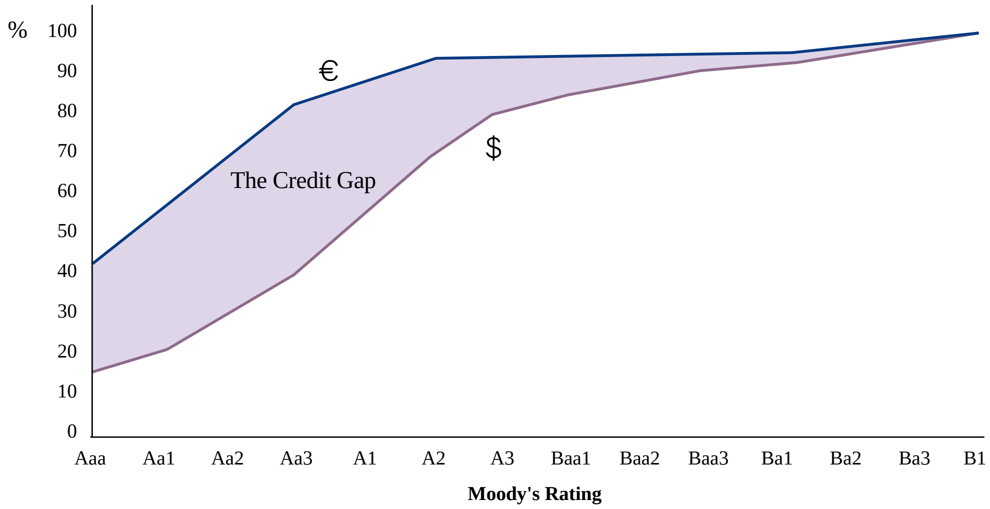
19 The demand for euro *commercial paper* is expected to increase as the euro capital market becomes more efficient. Until now, corporates have found it cheaper to issue dollar commercial paper and cover the exchange risk against European currencies through swaps. The introduction of the euro is expected to lead to much greater use by issuers of the commercial paper market in Europe.

20 The increasing focus in the euro bond market on credit risk is also expected to increase demand for *credit derivatives* to hedge, and speculate on, credit risk changes, and to provide protection against outright default. The demand for credit derivatives is expected to come, *inter alia*, from the following:

- Fund managers buying credit products and wishing to hedge against credit events (eg changes in credit ratings).
- Banks managing their balance-sheet exposure and needing to free up credit limits.
- Investors seeking to assume credit risk in the form of higher yields without having to accept interest rate risk.

21 As the euro bond market will be deeper and more liquid than the national currency markets that it replaces, market firms expect a *high yield* segment to develop. This should provide an opportunity for some smaller companies, and companies with a more risky financial profile (eg leveraged buy-outs), to raise funds in the euro capital markets. As a result, market firms expect the credit gap between the euro area, where around 70% of issuance is rated Aa2 and above, and the USA, where the equivalent figure is only 30%, to begin to close (see Chart F).

THE CREDIT GAP BETWEEN NEW ISSUES IN THE EURO AREA AND THE USA **CHART F**



Source: CSFB

22 *Underwriting* structures are also expected to change. National debt markets are currently dominated by local market firms with a local currency advantage. Last year the national market share of local market firms was estimated at 70% in Germany, 47% in France, 43% in the Netherlands and 33% in Spain. Market firms expect these local advantages to be significantly reduced after the introduction of the euro. Cross-border placing power should become increasingly important. Pan-European bonds are expected to be sold to domestic as well as international investors.

23 As the euro debt market evolves, market firms expect that their *research* capability will be critical in determining their ability to win mandates for new issues and support their trading and sales teams. At present, there are relatively few fixed income analysts focusing on credit issues in Europe. Market firms expect demand for credit analysts to grow as a result of the focus on credit risk in debt markets. Investors' understanding of research across Europe should also increase as accounting practices, regulatory and exchange reporting and disclosure requirements converge.

Equity capital markets

24 Some national equity markets in Europe have a significantly lower market capitalisation as a percentage of GDP than others. In 1997, Italy's market capitalisation amounted to 23% of GDP, Germany (32%), Spain (36%) and France (41%), compared with the UK (165%), Switzerland (163%) and the Netherlands (130%). These differences can partly be explained by different shares of bank loans in corporate financing, and partly by the use in some countries of cross-shareholdings, the continued existence of state-owned and family-owned businesses (eg the Mittelstand in Germany), and by public rather than privately funded provision for pensions. There are also residual regulatory restrictions on equity holdings in some countries (eg where they specify investment ceilings on foreign assets or that a specified minimum should be invested in government bonds). As a result of all these influences, the proportion of equities in institutional investors' portfolios varied (in 1996) between 71% in the UK, and 14% in France, 15% in Germany, and 17% in Italy.

25 Market firms expect this position to change in a number of ways:

- The introduction of the euro will widen the scope for investment without currency risk, and allow domestic assets to be reclassified as euro assets for most institutions in the euro area. Pressure is expected to grow for the remaining cross-border regulatory restrictions on equity investment to be removed.
- Demographic trends and budgetary constraints as a result of the Stability and Growth Pact are expected to encourage the growth of privately funded pensions and an equity culture in which companies are increasingly integrated into the euro capital markets.
- New equity issuance is expected to grow substantially in response to the build-up in institutional funds available for investment, particularly if there is a portfolio switch from bonds to equities in the medium term.
- Equity underwriting should become less fragmented between different national markets than it is at the moment.
- Benchmark indices are already beginning to emerge, both for the EU as a whole and for the euro area, divided by sector rather than by country (see below).

26 What new investor requirements will these changes create? First, market firms expect a *two-tier market* to develop between:

- a centralised top tier euro market in 'blue chips' which are included in European benchmark sector indices and traded across the market as whole; and
- a second tier of small and mid-cap stocks traded locally.

27 Second, market firms expect *trade execution* to become increasingly commoditised, as electronic access to exchanges becomes easier and cheaper. There will therefore be an incentive to offer added value through being able to execute more complex trades. These include portfolio and programme trades and large block trades, where an intermediary is required and where the availability of capital will be critical. The need for market-making in small and mid-cap stocks is expected to continue, but the need for market making in 'blue chips' is expected to decline.

28 Third, market firms expect that they will need to be able to deliver high quality pan-European *sectoral research* as well as country research. Changing their sales, trading and research operations from a country basis to a sectoral basis is proving to be a complex process.

29 Finally, European *advisory* (M&A) activity has grown by 25% per annum over the past five years. In 1997, M&A in the financial sector accounted for $145 billion out of a total of $370 billion. Market firms expect the introduction of the euro to accelerate the consolidation of industry sectors that would otherwise have occurred, only more slowly, and to extend to markets that have previously been relatively protected. Many industry sectors in Europe are still regarded as being relatively fragmented in comparison with the USA, though the position varies by sector and by country. For example, the top five banks in the Netherlands (based on total assets) have a market share of 81%, compared to 47% in France, 29% in Italy and 17% in Germany.

Fund management

30 The fund management industry will both influence and be affected by the changes in prospect in debt and equity capital markets. But market firms expect that the use of external fund management, which is relatively undeveloped in parts of the euro area at present, will grow substantially in the period ahead, particularly in Germany, the Netherlands, France, Italy and Spain. Recent market forecasts[1] suggest the following.

- *Pension fund* assets are projected to grow from $630 billion to $1,800 billion between 1996 and 2001. If the proportion of externally managed pension assets rises over the same period from 30% to 50% of the total, externally managed pension assets will grow from $350 billion to $900 billion.
- *Insurance company* assets are projected to grow from $2,600 billion to $6,300 billion between 1996 and 2001. If the proportion of externally managed insurance assets rises over the same period from 6% to 10% of the total, externally managed insurance assets will grow from $225 billion to $630 billion.
- *Unit trust* assets and the equivalent are projected to grow from $1,680 billion to $3,230 billion between 1996 and 2001.

31 At present, fund management mandates are generally awarded to local firms. But market firms expect that the introduction of the euro will improve the competitive position of firms with credit risk expertise (on bonds) and sectoral expertise (on equities) across Europe as a whole and globally, particularly where they can market products on a wide scale and provide the necessary IT support. Associated with the increase in funds under management, demand for custody, clearing and settlement services is also expected to grow in the medium term.

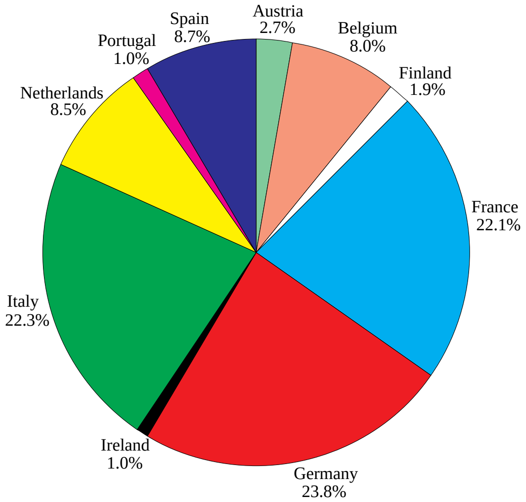
1 Source: Merrill Lynch.

32 Pan-European *equity funds* are already on the market. But fund managers also expect to launch actively managed euro area equity funds denominated in euro, and passive versions tracking euro area indices. It is not yet clear to what extent sector funds (eg covering the financial services sector, anticipating consolidation) will be limited to investment in Europe or global in scope. Other potential euro products include: euro cash products; euro bond funds; unquoted euro equity funds; and euro property funds, though the European property market is expected to remain fragmented.

33 To support the increase expected in cross-border investment by fund managers, *index providers* have already produced a range of indices for the euro area and other combinations of European countries.[2] The key features of some of these were summarised in the June *Practical Issues*. They include both:

- stock and bond indices which are intended as performance benchmarks for fund managers; and
- indices which are designed to cover the most liquid stocks in order to provide a basis for index derivatives and index tracking products.

EURO GOVERNMENT INDICES: COUNTRY WEIGHTS **CHART G**



Source: Barclays Capital

34 In the case of benchmark stocks, market firms are working on *equity derivatives* to help clients to rebalance their portfolios to match the weights in new pan-European or euro area benchmark indices. Matching cross-asset indices (eg bond funds with an equity or convertible element) is likely to be particularly complex. Some market firms have developed proprietary software to simulate the impact of EMU on regional equity portfolios, analyse the risks involved in the transition from a country base to a sector base, and propose ways of neutralising them.

2 The main euro equity indices that market firms intend to use include the following: FTSE Eurotop 300; FTSE Eurotop 300 Eurobloc; FTSE Eurotop ex-UK; FTSE Eurotop 100; FTSE Eurotop 100 Eurobloc; FT/S&P AWI (Europe); FT/S&P AWI (Eurobloc); Dow Jones STOXX; Dow Jones STOXX 50; Dow Jones euro STOXX; Dow Jones euro STOXX 50; MSCI Europe, MSCI Europe ex-UK, and MSCI EMU (all Small Cap, Value and Growth); Salomon Smith Barney Eurozone Equity Index. The main euro bond indices include: Reuters GOVTOP Euro Treasury Indices; Barclays Capital Euro Government Bond Indices; Lehman Brothers Euro-Aggregate Index; Merrill Lynch EMU Broad Market Index; JP Morgan EMU Government Bond Index; JP Morgan European Government Bond Index; Salomon Smith Barney EMU Government Bond Index; Salomon Smith Barney Euro Broad Investment-Grade Bond Index.

35 The market for *capital-guaranteed equity products* is also expected to grow. If a client is interested in a particular equity sector (eg telecoms), the task for the market firm is to fund a combination of stocks intended to produce the best return with the lowest volatility: the less volatile the basket, the cheaper the option underlying the capital guarantee, and consequently the higher the return to the client.

Conclusion

36 This Chapter has attempted to give an indication of the wide range of euro products and services that market firms will provide in wholesale financial markets in London in order to meet the changes in the market that the euro will bring. The services have been divided between money, foreign exchange and banking, debt capital markets, equity capital markets and fund management. Different market firms focus on different areas of the market. Some cover a relatively wide range of activities. Others specialise in particular areas. In all cases, they will continue to develop the euro services they offer in response to intense competition in the marketplace.

ABN·AMRO Bank

BankAmerica

Bankers Trust

BANK OF SCOTLAND

BNP BANQUE NATIONALE DE PARIS

BARCLAYS

CHASE

CITIBANK

CREDIT SUISSE | FIRST BOSTON

Deutsche Bank

Dresdner Kleinwort Benson

Goldman Sachs

HSBC

TSB Lloyds TSB Group plc

MERCURY ASSET MANAGEMENT

Merrill Lynch

JPMorgan

MORGAN STANLEY DEAN WITTER

NatWest Group

NOMURA

PARIBAS

The Royal Bank of Scotland

SALOMON SMITH BARNEY

A Member of TravelersGroup

Schroders

SG

Warburg Dillon Read

CHAPTER 7: BUSINESS, RETAIL AND PUBLIC SECTOR PREPARATIONS

1 In July, HM Treasury's Euro Preparations Unit (EPU) published a first report on the state of preparations for the single currency across the UK economy. It naturally focuses primarily on preparations for 1 January 1999. It acknowledges that preparations in the financial markets are well advanced; but accepts that elsewhere, including in the business sector, preparations are on the whole at a much earlier stage. The report also refers briefly to the preparations that are under way to give the UK the option of joining the single currency in due course. Copies of the report are available from 0171 270 4558 and the Government euro website at: www.euro.gov.uk Future reports will monitor and forecast the scale of impact of the euro on the UK while the UK remains 'out'.

2 As in the last *Practical Issues*, the first three sections of this Chapter cover preparations in the business, retail and public sectors for 1999 (while the UK is 'out'), whilst the final two sections cover the preparations ahead of joining the single currency.

A BUSINESS PREPARATIONS

3 Beyond the City, and the preparations more generally amongst the high street banks, preparations in the business sector remain at best patchy. Clearly many multinationals are planning to use the euro and preparing accordingly; and in some cases this has generated or intensified activity amongst their suppliers and customers. But awareness and preparedness remain low in many sectors, particularly amongst small and medium-sized companies.

4 To help develop awareness and understanding of the issues, the EPU has extended its information campaign. In July, press adverts appeared in the national newspapers. Television advertising began in September, accompanied by direct mailing to 1.6 million small and medium-sized companies. Radio advertising will begin in October. There will be a further two weeks of advertising in the national press. A series of 10 further factsheets produced in September, to supplement those published in June, are available from the Treasury on: 08456 010199.

5 The work is also being taken forward at regional level. Each region of England now has a euro forum. The fora are led by senior business people from each of the regions. They bring together the key players that are helping business, particularly SMEs, to prepare for the euro, for example, Business Links, Government Offices and Bank of England Agents, to provide a focus for local euro preparations activity. Similar arrangements are in place in Scotland, Wales and Northern Ireland.

6 The Bank's regional Agents are also assisting the Treasury in seeking to establish the extent to which the euro will be used by businesses while the UK remains outside the euro area. A questionnaire has been prepared to be used over time by the Agents in their discussions with their regular business contacts, and the results will be monitored to gauge the extent of euro use in the economy, alongside other arrangements introduced with the Treasury.

7 In September 1998, FEE will publish a detailed euro guide and checklist for SMEs, covering all major functions including marketing and pricing, customers, suppliers, financial systems, software, accounting and taxation, banking and staff training. In addition a number of case studies of company changeover arrangements are being prepared by FEE, for publication on their website.

B RETAIL PAYMENT PREPARATIONS

Cheques and credits

8 The Cheque and Credit Clearing Company is developing a bulk paper clearing system to process euro-denominated domestic cheques from 4 January 1999. Euro-denominated cheques from other countries will continue to be cleared overseas through existing systems. Its Board has also agreed to the principle of preparing for a euro credit paper clearing. This will not be implemented in January 1999, but it could be introduced within a six-month timescale, if required.

9 In addition, members are developing the functional specification for a euro Inter-Bank Data Exchange (IBDE), which is a fully automated electronic clearing system.

10 In order to differentiate, both visibly and in the automated process, domestic cheques denominated in euro from those in sterling, changes have been made to the relevant APACS standards. The following visual identifiers will be added to cheques drawn in euro on UK banks:

- a black or dark coloured line at the right hand leading edge ending above the amount box;
- the words ‘euro euro euro’ printed between the amount box and the date line;
- the euro symbol printed in the top right hand corner of the cheque; and
- the euro symbol to replace the £ symbol in the amount box.

11 The APACS Standards Unit has issued an amendment to APACS Standard 3 giving details of the changes required. This was sent to all subscribers to Standard 3 in early June. A similar amendment for credit vouchers was issued at the same time. These documents are available from APACS on subscription or through banks.

BACS

12 A BACS service for euro-denominated credits will become operational on 4 January 1999. The currency indicator will be held in the batch header rather than at transaction level and items will remain in their original currency as they pass through the BACS infrastructure. If the receiving account is held in a different currency, the receiving bank will make the necessary conversion.

13 BACS continues to consider whether to introduce a euro direct debit service prior to the fully automated credit and debit solution being brought on stream.

Travellers cheques

14 The major travellers cheque issuers have agreed a common approach to clearing euro travellers cheques, along with a standard format for the code that will appear in the MICR line at the bottom of the cheques. They have informed the European Committee for Banking Standards of their decision. All euro travellers cheques will be cleared in France, and the standard encoding format will be the existing standard for French franc cheques, known as CMC7. The illustration shows an example of a euro travellers cheque using this encoding format.

15 During the transition period, customers will be able to buy euro travellers cheques from the issuer using cash in any NCU, including those of countries other than the one in which the purchase is being made; or in euro using payment methods other than cash, such as euro credit cards. As with any travellers cheques, they will also be able to pay in other major currencies, for which the issuer will charge a commission.

16 Within the euro area, the customer will be able to exchange the cheques for the NCU of the country they are in, at offices of the issuer, at its appointed agent banks, or at bureaux de change. They may also be able to exchange them for other NCUs, although there may be an additional charge for this service. Some merchants will also accept them, paying them into their bank accounts in the usual way, whether the account is in euro or a legacy currency.

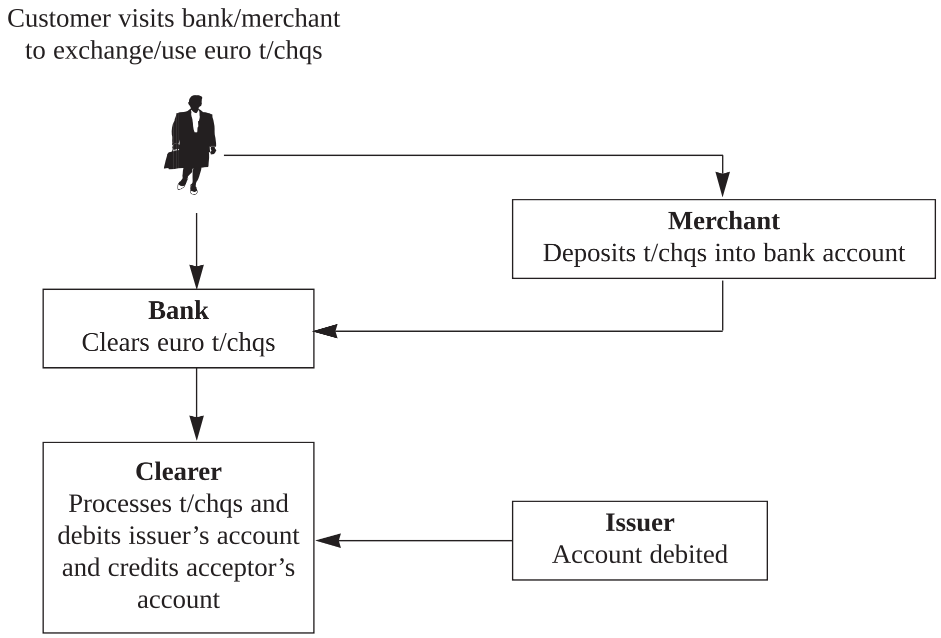
17 The major issuers will continue to sell NCU travellers cheques until near the end of the transition period. Some issuers and banks will exchange travellers cheques denominated in one NCU for cash in another. However, charges for this are likely to be higher than for encashing euro cheques. Strongest demand for euro travellers cheques may therefore come from people who will be travelling to a number of countries in the euro area. After the end of the transition period, any outstanding NCU cheques will be able to be exchanged indefinitely for euro at the fixed conversion rates. Issuers will stop selling ECU travellers cheques before the end of 1998, although it will be possible to encash any outstanding thereafter as if they were in euro.

18 Outside the euro area, including in the UK, euro travellers cheques will be much like any other foreign currency travellers cheques. It will be possible to buy them and exchange them for sterling, for which the usual charges and commissions will apply.

19 Once a bank has encashed a euro travellers cheque, or is collecting it for a merchant, it will be able to clear it in one of three ways.

- Send it to its French correspondent bank, which would credit its account with the amount of the cheque. The correspondent would then clear the cheque in France: it would use the French cheque clearing system to receive funds from the issuer's account at the issuer's appointed clearing bank in France.
- Send the cheque direct to the issuer's appointed clearing bank in France. This would be the fastest way to clear the cheque, although there may be additional charges if it does not have an account at the appointed clearer.
- Send it to its euro correspondent, as long as that bank was a participant in the French cheque clearing system or had access to it through another bank.

20 Since the first two of these methods are the main ways to clear French franc travellers cheques at present, a general rule is that banks will be able to clear euro travellers cheques in whatever way they currently handle those in French francs.



Source: Thomas Cook

C PUBLIC SECTOR PREPARATIONS

21 In July, the first meeting of the Ministers responsible for departmental euro preparations was held. A formal structure was established for departments to report on their preparations for 1999 as well as those for the possibility of subsequent UK entry. Another progress meeting of this Ministerial group will be held in October.

22 The Euro Preparations Unit has published a booklet focusing on what the euro will mean for local authorities, covering both the launch of the single currency in January and preparations for possible UK entry.

D OUTLINE NATIONAL CHANGEOVER PLAN

23 The Government is currently preparing an outline national changeover plan setting out the steps which would be required if the UK were to join the single currency. The plan will be published around the turn of the year.

24 The EPU is responsible for preparing the plan, working closely through eight working parties with the Bank of England, banks, other businesses, public authorities and other organisations. The preliminary conclusions will be reported to the Business Advisory Group and the Chancellor's Standing Committee in the Autumn. The Bank is chairing the working party on the changeover in the wholesale financial markets; a preliminary report has been submitted to the Treasury.

E EURO CARDS AND CASH

Cards

25 In recent months the APACS Card Payments Group Single Currency Working Group (SCWG) has been actively pursuing the co-operative aspects of the card industry project, to ensure an effective and successful migration to the euro in the event that a UK decision to join the euro is ultimately announced.

26 A *UK Card Industry Single Currency Migration Plan at Point of Sale (POS)* has been agreed. As well as setting out a timetable for the key steps and some of the other co-operative issues which would need to be managed by the industry, specific responsibilities have been identified for the card schemes and individual acquirers. APACS Standards Development Groups for Standards 29/30/40/50 are progressing the changes that will be required to the merchant-acquirer message interface to accommodate a currency indicator. The two accompanying documents which form an integral part of this migration plan are:

- *UK Card Industry Guidelines for Euro at POS Terminals;* and
- *UK Card Industry Guidelines for the Euro Paper Environment.*

27 Switch, the domestic debit card scheme, is continuing to work with its members on the infrastructure changes to be put in place for the processing of euro transactions.

28 The SCWG is now focusing on a risk assessment and a communication programme.

29 The Cheque Card Management Committee will consider at its next meeting in September the implications of a possible migration to the euro for cheque guarantee cards. While the UK remains 'out', there is no expectation of a demand for euro cheque guarantee cards even though UK cheques denominated in euro will be available (because they are expected to be predominantly used by the business sector). For a future possible UK 'in' scenario, consideration is being given to the (i) longevity of the scheme, (ii) scope and remit of the scheme in a euro

environment (ie remaining domestic or becoming European-wide) and (iii) conversion of over 52 million cards. The intention is to draw up a migration plan by November if a consensus amongst members emerges.

Euro banknotes and coin

30 The Bank and the Royal Mint, in conjunction with APACS, are continuing to refine their estimates of the initial stock of euro UK notes and coin that would be required, if the UK were to join. Although the earliest possible launch day for euro notes and coin in the UK is still several years ahead, it is important to know the approximate production quantities well in advance, particularly so that there would be adequate stockpiles of sterling notes and coin when production would be directed to euro and so that sufficient secure storage could be made available. Estimates of euro demand cannot be at all precise at this stage, not least because of uncertainties over trends in the use of cash in the intervening period, the public's preference for particular euro denominations and the time of year when euro notes and coin might be launched.

31 Following the endorsement by APACS Cash Services Group (CSG) of the *UK Cash Euro Blueprint*, a workplan has been developed for future activity on the possible replacement of sterling notes and coin by euro. Two working groups have been established on storage and transport logistical issues, and discussion has started with the relevant Army agencies about the logistics of the changeover and the possible use of HM Forces' storage and transport facilities.

CHAPTER 8: OVERARCHING ISSUES

A THE LAW

Third country legislation

1 The Financial Law Panel (FLP) has now published its report on continuity of contracts under the law of Singapore. Even though the Regulation under Article 235 of the Treaty does not apply as part of the domestic law in Singapore, the report concludes that this seems to be of little consequence in respect of monetary obligations given the natural inclination of Singapore law towards continuity. The report notes that the position is perhaps less clear as regards ECU obligations in contracts governed by Singapore law, but Singapore courts might well conclude that the EU legislation should have the same effect in Singapore in any event. More importantly, there are thought to be relatively few examples of longer-term ECU obligations governed by Singapore law. The report also notes that there appears to be a high level of awareness of the issues involved at the level of Government and regulators and at market level.

2 The June *Practical Issues* reported that the Hong Kong Monetary Authority was considering whether legislation was necessary to ensure continuity of contract upon the introduction of the euro. It has now been decided that specific legislation is necessary, and the Hong Kong Government is tentatively aiming to introduce a draft bill in October. Its objective will be to remove any doubt about continuity of contracts denominated in participating national currencies or ECU, subject to anything that the parties concerned may have otherwise agreed.

3 The only other overseas jurisdictions in which similar legislation has been enacted are certain states in the USA. New York and Illinois legislation was adopted in July 1997, while corresponding legislation in California came into force in June 1998.

4 Other countries known to have considered their position, but which have no current plans to introduce specific legislation to deal with the euro, include Canada, Malaysia, South Africa and Switzerland. Our understanding is that Japan also has no such plans.

THE POSITION OF THE OFFSHORE ISLANDS

Background

The Channel Islands and the Isle of Man, which are Dependencies of the Crown, have a special status in relation to the European Union. Protocol 3 attached to the UK Treaty of Accession to the European Community (as reflected in Article 227(5)(c) of the Treaty of Rome) states that the Treaty is applicable to them only in a limited way – effectively in relation to the free movement of goods but not of services, people and capital – and certainly does not cover the EMU provisions which were subsequently introduced into the Treaty at Maastricht.

The monetary and exchange rate relations between the UK and these territories are not based on formal bilateral agreements. Each territory has its own local currency denominated in sterling, which has legal tender status within its respective territory but not in the UK. In effect, these local currencies are 'substitute sterling'. In addition Bank of England notes circulate freely, and also have legal tender status, in those islands. They can be exchanged at par on the basis of an informal agreement with UK banks. The Bank of England has no obligations in respect of the local notes and coin issues. In sum, each of these territories is in a *de facto* monetary union with the UK.

These arrangements will continue while the UK remains outside the euro area. The islands are nevertheless faced, in the same way as the UK, with the need to prepare the introduction of the euro from the beginning of 1999. The relevant legal preparations, practical preparations, and strategic issues are set out below. A final section considers the islands' position if the UK were eventually to join the euro area.

Legal preparations

The UK had no need for separate legislation to introduce into UK law the continuity and rounding provisions of the Article 235 Regulation on the introduction of the euro, because that Regulation applies automatically in all Member States of the European Union. For this purpose, however, the Channel Islands and Isle of Man are no different from any other third country and, just for example like certain US states, they have decided to introduce legislation to replicate in particular the continuity provisions of the Article 235 Regulation.

In Jersey, the relevant legislation is the Community Provisions (Provisions Relating to the Introduction of the Euro) Jersey Regulations. These provide for every reference to the ECU in legislation, administrative acts, judicial decisions, contracts, payment instruments and other instruments having legal effect to be replaced by a reference to the euro, at a rate of 1:1. The Regulations also make clear that, unless agreed by the parties, the introduction of the euro does not affect the rights or obligations under a legal instrument, or entitle a party to alter or terminate a legal instrument. The conversion and rounding provisions of the Article 235 Regulation are not replicated in Jersey's legislation because they form part of the *lex monetae* of the euro area, which will be recognised by the Jersey Courts. Separate legislation, on which consultation is continuing, is contemplated to permit redenomination of share capital denominated in an 'in' currency into euro, permitting reduction of share capital resulting from conversion and rounding without a court order, and confirming that new share certificates would not be necessary for redenominated shares.

Essentially the same provisions on continuity will be included in Guernsey by virtue of the European Communities (Euro Miscellaneous Provisions) (Guernsey) Ordinance, 1998, and it is expected that similar legislation will be made in Alderney and Sark. It is also possible that secondary legislation on no par value shares - already foreseen as of likely benefit to the collective investment fund administration/management sector – will be adopted under extant enabling provisions. (Alderney company law already possesses no par value share provisions; Sark does not have company law.) The authorities are also considering whether other changes to company legislation may be appropriate.

In the Isle of Man it is planned to make an Order in Council to adopt the relevant parts of the Article 235 Regulation, and it is expected that this will be laid before the Island's parliament shortly.

Practical preparations

In all the islands, the approach to the start of EMU is the same as that being taken in the United Kingdom. They are all international financial centres, and the conversion weekend will have the same significance for them as for the City of London. In Jersey, all companies are being encouraged to prepare an inventory of the systems thought likely to be affected by the introduction of the euro, especially application software and the networks which connect those systems to other organisations and suppliers. In Guernsey, a working party was established in 1997 to increase awareness of EMU through consultation and liaison, and it intends to produce in October guides on EMU for the public and for business. In addition a series of workshops will be held in the autumn, following a conference arranged last January. The regulatory authorities in Guernsey have also monitored preparations made by financial institutions and encouraged such institutions to make the necessary changes to their systems as early as possible.

In the Isle of Man, a government working party was established in January of 1997 and this has actively been involved in raising awareness and addressing relevant issues. Business seminars have been held by a variety of financial institutions and professional bodies. In addition, the relevant regulatory authorities, whilst avoiding intrusive prescription, have been stressing the need for regulated institutions to continue to meet their ongoing regulatory obligations, including those of having in place adequate systems and controls, and discussion of the relevant issues has been encouraged within local trade organisations.

Strategic issues

Just as on the mainland, financial institutions in the islands will have to consider the consequences for their businesses of the introduction of the euro. Many will be assisted by the fact that they are part of international organisations with a significant presence in London and/or elsewhere in the EU and therefore will benefit from the planning process being embarked upon on a group basis. More difficult is the position of small businesses, which might trade with Europe but underestimate the significance of the introduction of the euro even though their territory is outside EMU. In Jersey, for example, the authorities intend to issue a general guidance note to assist all businesses and residents in understanding what they will face from 1 January 1999, and a standing group of representatives of the business community and public sector has been established to monitor the situation and respond to any areas of difficulty as they arise.

If the UK were to join EMU

If the UK were to adopt the single currency, the islands would not do so automatically but would need to take their own independent decisions. In practice, all the jurisdictions would almost certainly seek to use the euro at the same time as the UK; and an explicit decision to this effect has already been taken in the Isle of Man. In that event the islands are nevertheless likely to wish to continue the practice of issuing their own notes and coin, denominated in euro (the Isle of Man has already so decided and is preparing designs). Any such euro notes and coin would only have legal tender status within their respective territories, analogously to their sterling issues now. The island authorities could also declare as legal tender within their territories euro notes and coin issued within the euro area. It would be crucial that any euro notes issued by the islands were clearly distinguishable from those issued by the ESCB. The ESCB Statute (Article 16) contemplates the continuation of existing practices with regard to the issue of banknotes, and it would clearly be for the island authorities to discuss their proposed approach on euro banknotes and coin with the appropriate European authorities.

As far as practical preparations are concerned, all the islands will have the same concerns as in the UK about lead times for entry and subsequent introduction of euro notes and coin.

ISDA EMU Protocol

5 The ISDA EMU Protocol continues to meet with widespread acceptance, with 310 adherents as at 10 September. ISDA have held a series of roadshows in Europe, North America, Japan, Hong Kong and Singapore. The deadline for adherence is 30 September, and ISDA will not accept adherence letters after that date, to enable parties to enter into bilateral negotiations with counterparties who have only partially, or not by then, adhered. It is also recommended by ISDA that parties who have already adhered should review their corporate structures to identify subsidiaries or affiliates that would benefit from adhering to the Protocol.

Euro and euros

6 The European Commission is considering the correct usage of the words ‘euro’ and ‘cent’ in all the Community languages. Although the Regulations on the euro have, in their English version, used ‘euro’ and ‘cent’ in the plural without adding an ‘s’, it has been pointed out that this runs counter to normal English usage in most circumstances (and is also contrary to the usage suggested by the Commission for languages other than English). In practice, normal English usage would always include an ‘s’ in the plurals of euro and cent when amounts are being described, although it would be possible to omit the ‘s’ when the intention is to describe the euro as the currency in which a price is denominated (analogously to the word ‘sterling’).

B ACCOUNTING

7 The June *Practical Issues* included a draft Appendix to the guidance (Abstract 21) on accounting issues arising from the introduction of the euro, issued by the Urgent Issues Task Force of the Accounting Standards Board. This Appendix has now been finalised, following consultation, and is essentially unchanged from that published in the June edition.

C TAX

Methods of payment

8 It was reported in the March *Practical Issues* that the Government was considering ways to facilitate the payment of taxes in euros from 1 January 1999. Since then, the Inland Revenue and

Customs and Excise have carried out a joint survey of 2,000 of the largest taxpayers to find out how they intended to pay tax in euros. This showed that about 30 planned to use the euro to pay VAT and some 20 for corporation tax and income tax. It was announced on 31 July that both departments are putting in place arrangements to deal with this scale of payments, and also that the Revenue will have the capacity to handle larger volumes if and when the demand grows.

9 Both departments are still discussing the details with their bankers, and they expect that they will be able to accept payment in euros by cheque, BACS (credit) or CHAPS from the start of 1999. The departments will be charged a fixed amount per day per account for the cost of converting payments into sterling. The cost will be comparatively small in relation to the cost of the departments' banking operations and it will be borne by the Revenue departments.

10 The taxpayer will be credited with the sterling value which is actually received by the departments after conversion at the prevailing rate. The two departments intend to examine and continue to consult on the precise details of these arrangements, including how best to collect underpayments or repay overpayments which arise as a result of currency fluctuations.

11 These arrangements will apply to all taxes handled by the two departments, from businesses or other taxpayers, and will apply to existing liabilities as well as new ones. The arrangements will also apply to National Insurance Contributions. The Inland Revenue is working jointly with the Contributions Agency in agreeing the details.

12 Neither department is currently proposing to make repayment in euros because this would be too costly, and repayments are not currently made in foreign currencies. Nor are there any current proposals for accepting *returns* of any kind in euros.

Technical tax consequences of the introduction of the euro

13 We reported in the June *Practical Issues* that the Inland Revenue was continuing consultation with market associations about specific tax issues arising from the introduction of the euro. A press release detailing proposals has now been issued, for comment. It is intended to finalise the proposals in draft regulations to be published in the autumn.

14 The proposed changes deal with four broad sets of questions:

- the treatment of assets/contracts denominated in participating currencies where redenomination into euros might otherwise give rise to a disposal or transfer or bring forward a tax charge; and the treatment of derivatives involving redenominated assets;
- the treatment of financing transactions involving redenominated assets;
- the treatment of the costs of redenomination; and
- the interpretation of the special rules allowing for accounting in foreign currencies for tax purposes.

In general, the Government's approach is to try to ensure as far as possible that the introduction of the single currency next year in the first wave is tax neutral and therefore does not give rise to a charge or a loss which would not otherwise have arisen.

15 In relation to *continuity of assets and contracts*, the Government proposes to introduce regulations to:

- ensure that, where assets are subject to a straightforward redenomination, there is continuity for capital gains tax purposes both for the assets and any related derivative contracts within the scope of TCGA 1992;
- provide for the appropriate treatment of any cash payments received as a result of the redenomination of bonds in the hands of investors;
- ensure that redenomination does not disturb the relief on unrealised exchange gains under s139 FA 1993;
- provide for continuity of currency contracts and options involving two currencies which convert to the euro.

16 For *financing transactions*, such as stock loans and sale and repurchase agreements, involving straightforward redenominations (of bonds), the Government intends to ensure, by regulation if necessary, that the redenominated bonds will count as the 'same' or 'equivalent' assets for the relevant tax provisions. The Government also intends to introduce a regulation to ensure that intermediaries obtain the appropriate deduction for any charge arising on passing on a cash payment arising from a redenomination.

17 On *costs of redenomination,* the Government proposes to introduce a regulation to allow the costs of redenomination into euros of existing non-sterling capital assets so long as the redenomination involves only the replacement of existing stock and not the issue of increased amounts or of greater value. The Government also proposes to make clear in regulations what costs will be allowable in relation to the redenomination of investments.

18 Finally, in relation to *accounting for tax purposes in euro,* the Government proposes regulations to ensure the continuity of local currency elections for participating currencies and to allow companies to make a local currency election for the euro before the euro comes into existence, but only for accounting periods commencing on or after 1 January 1999. In addition, it proposes a regulation amending the special rules for computing the chargeable profits of controlled foreign companies (CFCs). The rules lock a CFC into computing profits in the currency used by it in its first relevant accounting period. The proposed regulation will ensure that, where that currency is replaced by the euro, the currency to be used in computing future profits will switch automatically to the euro.

19 Although the consultation with representative bodies has focused mainly on the corporate sector, the Government also intends to use the regulations to deal with any tax issues that may specifically affect other taxpayers, including individuals. It will, for example, take the opportunity to ensure in the regulations that the conversion of cash holdings in a foreign participating currency by UK resident individuals into euro will not give rise to a capital gain or loss.

20 The Box below sets out more details in a set of 'questions and answers'.

FURTHER TAX ISSUES ARISING AS A RESULT OF THE INTRODUCTION OF THE SINGLE CURRENCY IN OTHER MEMBER STATES

The Question and Answer statement below on tax issues arising as a result of the introduction of the single currency in other Member States should be read in conjunction with the Revenue Press Release of 21 January, 1998 entitled *Some tax issues arising as a result of Economic and Monetary Union.* The statement deals with certain further tax issues arising as a result of EMU that have been raised with and agreed by the Inland Revenue.

The statement is not intended to address comprehensively all the issues that might arise as a result of the introduction of the single currency in other Member States and does not cover possible tax issues that might arise if the UK were to join the single currency.

1 Continuity of assets

1.1 In what circumstances will the fact of Monetary Union and/or the redenomination of an asset (ie a debt security, instruments or contracts) from a participating currency into euro be regarded as giving rise to a disposal, transfer, etc of the asset (or a derivative over the asset) and an acquisition of a new asset (or derivative) by a taxpayer and in what circumstances will the taxpayer receive continuity of treatment, ie so that the taxpayer is treated as still holding the same asset or derivative that it has always held?

A The issue should not be relevant to a company to the extent that it is taxed in relation to the asset or derivative under the foreign exchange, financial instruments or loan relationship legislation. In those circumstances, the Inland Revenue would expect the accounts to be followed (subject to the specific rules in those provisions).

In other circumstances, under the application of the existing law on capital gains, the redenomination could give rise to a taxable gain or loss. However, the Government accepts that it is not desirable for a charge to arise on a *straightforward* redenomination of an asset consequent on the introduction of the single currency.

It therefore proposes to introduce a regulation to ensure that if an asset is redenominated in euros and the post-redenomination asset is *in all material respects* the same as the pre-redenomination asset (ignoring the changes reasonably required to give effect to the redenomination), then, where this would not otherwise be the case, the redenomination will not be regarded as involving a disposal or acquisition, and the asset will be regarded as the same for capital gains purposes.

If other changes are simultaneously made to the asset beyond those associated with a straightforward redenomination, then the question of whether those other changes give rise to a transfer or disposal and an acquisition of a different asset or derivative will need to be considered in accordance with existing principles.

1.2 How will cash-outs received as a result of a redenomination of bonds be treated in the hands of investors?

A Any cash received as the result of a redenomination will need to be recognised by the taxpayer. In the case of a person holding the asset as part of its trade or of a company taxed in relation to the asset for example, under the loan relationship or financial instrument provisions, the treatment should follow existing rules.

Where the asset falls under the capital gains regime, under current law cash received may fall to be treated as a part-disposal. However, the Government is willing to accept that small amounts deriving from a straightforward redenomination should not be taxed, and therefore proposes to introduce a regulation to provide a *de minimis* exemption for cash payments received on redenomination as a result of the introduction of the single currency. This should tie in with the proposed regulation on continuity of assets and with current provisions such as the part-disposal provisions on the conversion of securities in s133 TCGA 92. The Government is still considering the question of the appropriate treatment of cash-outs derived from the repackaging of odd-lots and would welcome comments on this subject.

Note: Q&A 1.1 and 1.2 do not cover the redenomination of equities and equity-related instruments, since detailed consideration of this issue can only be given once it becomes clearer how the redenomination of equities is to be achieved and since it is not likely that many companies will re-denominate their shares in the early days of the single currency. At present, it does not seem that any new capital gains issues are likely to arise in this area, since the UK has existing legislation which deals with the capital gains consequences of reorganisations of share capital.

2 Equities

If a UK company were to redenominate any of its share capital during the transitional period on the introduction of the single currency into euro and, due to rounding, a payment of cash or an issuance of new stock is required to be made to shareholder, will that payment of cash or issuance of stock give rise to a dividend or distribution?

A The consequences of redenomination of equities (ordinary shares), preference shares and convertibles, can all be dealt with under the normal rules. A cash payment in respect of shares would therefore constitute a distribution except where and to the extent that it fell to be treated as a repayment of share capital.

A cash payment in respect of securities within s209 (2)(e)(ii) would also more than likely fall to be treated in whole or in part as a distribution. This treatment will apply equally for conversions of any non- £ and £ shares, preference shares or convertibles.

3 Options and other derivatives

3.1 In paragraphs 2.1 and 2.3 of the Press Release of 21 January, certain guidance is given in relation to ‘currency contracts’ as defined in section 150 FA 1994. Will the same guidance apply to ‘currency options’ as defined in that section?

A Yes

3.2 An interest rate contract (within section 149 FA 1994) must include the right to receive or a duty to make a variable rate payment. A variable rate is one based on a rate the value of which at any time is the same as that of the variable rate of interest specified in the contract, for example PIBOR. Will an interest rate contract, or an option to enter into such a contract which specifies a variable interest rate by reference to a currency which converts to euro such that the original specified rate no longer exists, be regarded as having terminated and been replaced by a new contract or option?

A Such a change to the subject matter of a contract may cause the contract to be void, voidable, or possibly frustrated. However, the contract may continue to exist for a number of reasons. The changes may be insufficient to cause the contract to be frustrated, by reason of the law under which it is written. Similarly, the change in questions may have been anticipated and be successfully provided for in the original agreement. Alternatively, the contract may remain operative by reason of the bilateral agreement of the counterparties to maintain it, which may or may not technically give rise to a new contract.

It is the Government's intention that a contract which 'continues' for whatever reason (including when the new bilateral agreement gives rise to what is technically a new contract) will not give rise to a taxable event provided that the economic substance of the contract is not materially altered. As for assets in 1.1 above, the economic substance will be considered to be unaltered where there have been no material changes in the relevant factors.

It should be noted that the contract may be in respect of an underlying instrument which itself is not considered to have continued. In these circumstances the contract will be considered in its own right; the question will be whether, in economic substance, the contract has the same effect as before conversion.

In any event, if the contract falls within the FA 1994 regime for derivative financial instruments, and so is accounted for on an acceptable accruals or mark-to-market basis of accounting, it is likely that the tax consequences of a taxable event will be exactly the same as those arising if there had been no such event.

3.3 There may be transactions in futures or options in foreign currencies or in foreign currency denominated equities/debts/other financial instruments which are denominated in foreign currencies which do not fall within Schedule 5AA ICTA 1988. However, the effect of the introduction of the single currency and/or the redenomination of assets may be to give rise from that time to a fixed return which is from that point a 'guaranteed return'. Will the provisions of Schedule 5AA apply in these circumstances?

A Schedule 5AA ICTA 1988 applies where the main or one of the main purposes of the transaction in question is the production of a return that is guaranteed. It follows that one looks to the purposes of the parties at the time of entering into the transaction. Accordingly, the mere fact that the return from a future or option becomes fixed as a result of and from the time of the introduction of the single currency would not result in the provisions of Schedule 5AA being applied, unless, in entering into the transaction in question, that was an intended result within the meaning of Schedule 5AA.

3.4 Schedule 5AA ICTA 1988 deals with the taxation of the profits and gains arising from transactions in futures and options that are designed to produce guaranteed returns. Will conversion constitute a disposal for the purposes of Schedule 5AA, causing any inherent profits and gains to be realised for tax purposes at that time?

A The treatment of a conversion for the purposes of Schedule 5AA will follow that proposed at Q1.1.

3.5 Sections 143-148 TCGA 1992 provides, *inter alia*, for the taxation of option contracts which are not taxable under Schedule D (broadly option contracts which do not fall within the Financial Instruments rules set out in FA 1994, or within the anti-avoidance rules set out in Schedule 5AA ICTA 1988, and which are not held on trading account). Section 144 TCGA 1992 will apply for example to an investment company holding an option over shares which qualifies as a financial option. The basic approach (under Section 144 TCGA 1992) is to treat an option as a separate asset for capital gains purposes except where it is exercised, in which case, its grant (or acquisition) and the acquisition or disposal of the underlying subject matter are treated as one transaction. Will the start of the single currency and/or the redenomination of either the option or the subject-matter of the option be regarded as giving rise to settlement or lapse without exercise of an existing option and the entering into a new one?

A The regulation referred to in paragraph 1.1 will provide for the continuity treatment for capital gains purposes, where appropriate, both for assets and for derivatives (including options) over assets.

4 Financing transactions

4.1 Where a debt security denominated in a participating currency is re-denominated into euros, will the re-denominated security be regarded as similar to/equivalent to/the same description as the original security for repo/stock-lending and related purposes (ie for the purposes of the following provisions:

- Sections 80C and 89AA FA 1986;
- Sections 730A, 730B, 737 A and 737C ICTA 1988;
- Section 263B TCGA 1992;
- Paragraph 15 of Schedule 9 FA 1996)?

A In the case of straightforward redenominations - see Q 1.1 - the Government will ensure (by regulation if necessary) that re-denominated securities will count as similar to/equivalent to/the same description as the original securities for the tax provisions relating to repo and stock lending for all taxpayers covered by Q1.1. The Government is still considering how the law should apply for financing transactions involving redenominations which would not meet the proposed ‘same asset’ tests.

4.2 Where ‘cashing out’ takes place on redenomination, for example, due to rounding, will payments representative of the cash amounts be treated as manufactured payments?

A The starting position would be that we would expect the characterisation of the representative payments to mirror that of the payments they represent. To the extent, therefore, that cash amounts themselves are capital payments, the payments representative of them would not count as manufactured payments.

However, where the person making the representative payment is not taxed on a trading basis, the tax liability may not correspond to the economic effect of his action in receiving cash payment and passing it on. The Government will introduce a regulation so that where cash-outs due as a result of a redenomination are passed on, the intermediary obtains the appropriate deduction from any charge. This will only apply, however, where it is clear that no abuse is taking place in relation to credits for tax withheld (if any) or underlying tax relief.

Note: Q4.1 and Q4.2 do not cover financing transactions involving equities which are redenominated into euro. The treatment of financing transactions involving redenominated equities will be addressed, along with continuity questions, when it becomes clearer how share redenominations are to be achieved. However, insofar as similar issues arise, the Government will wish as far as possible the principles established for transactions involving redenominated bonds to carry over to equities so that in the case of straightforward redenominations, the provisions referred to above will apply.

5 Costs of redenomination

5.1 Will costs incurred by a company upon redenomination, as a result of the introduction of the single currency, of securities and equities issued by it be deductible for tax purposes?

A The costs incurred upon redenomination of a company's loan relationships are already provided for in the existing legislation and will be regarded as charges and expenses within section 84(3)(a) to (d) FA 1996.

For other non-sterling securities or equities, which are redenominated as a result of the start of the single currency, the Government believes there is a case for legislating a special relief. Accordingly, the Government proposes to introduce a regulation to allow the costs of redenomination into euros of existing non-sterling capital assets (both for traders and investment companies) so long as the redenomination involves only the replacement of existing stock and not the issue of increased amounts or of greater value. This regulation will not apply to costs attributable to any other factor - eg to other changes made to a security or equity at the same time as redenomination. To the extent that such costs are not attributable to the start of the single currency, their deductibility will be determined in accordance with existing principles.

5.2 Will costs incurred by an investor as a consequence of its investments being redenominated as a result of the introduction of the single currency be deductible for tax purposes?

A As far as the costs of redenomination of investments is concerned, some costs may be allowable under current law as a trading expense or as an expense of management of an investment company, but others would not. The Government therefore proposes to make explicit in regulations exactly what will be allowable.

In the particular case of costs attributable to changes to computer software, the Revenue has already given guidance at paragraph IM 664 of the Inspectors' Manual.

6. Foreign exchange

6.1 Will non-trading companies be able to make a local currency election to adopt the euro as their functional currency rather than sterling?

A No. Non-trading companies will not be able to make a local currency election to adopt the euro as their functional currency.

6.2 It may not be apparent to a trading company that the inauguration of the single currency has made the euro the most appropriate currency for the company's accounts until some time after 1 January 1999 or even the start of its first post-January 1999 accounting period. Are there any plans to introduce a 'window period' (of, say, 92 days, by analogy with the transitional provisions for the commencement of the forex provisions) for the making of an election for euro to take effect from the start of the accounting period of the company in which the single currency begins, or of the first post-January 1999 accounting period of the company?

A The Government does not intend to introduce a window period in respect of the timing rules on local currency elections. However, to facilitate the making of elections for the euro, the Government proposes to introduce a regulation which would amend the existing local currency rules to allow companies to elect, prior to 1 January 1999 (ie before the euro actually exists), for the euro for accounting periods commencing on or after that date. This will put beyond doubt the ability of companies with 31 December year-ends to elect for the euro for accounting periods beginning on 1 January 1999. The Government has already announced that it intends to introduce a regulation to ensure that existing local currency elections in participating currencies are converted automatically to the euro.

6.3 Are there any plans to allow a company with euro-denominated share capital and euro-denominated assets to match these under Schedule 15 FA 1993 or any extension thereto?

A No. There are no plans to extend the circumstances in which a matching election may be made.

7 Authorised unit trusts - stamp duty and SDRT

The start of the single currency is likely to give rise to an opportunity for, or commercial desire for, significant rationalisation of unit trusts. However, the existing provision (contained in section 95 FA 1997) for rationalisations of authorised unit trusts to take place without any stamp duty or SDRT charge arising on the relevant transfer of assets expires on 30 June 1999. Are there any plans to postpone that expiration date?

A An extension of the deadline for these reliefs would require legislation. AUTIF have asked Ministers to consider an extension, for a variety of reasons of which EMU is one, but no decision has yet been taken.

FEE survey

21 FEE has recently published a survey of the requirements by country of the tax authorities and provides information about tax returns, tax payments, tax treatment of translation differences on dealings in foreign currencies, treatment of costs associated with the changeover, and whether rounding up or down is to be treated as a taxable event. The survey identifies whether there are to be any special arrangements on whether the existing tax laws in the different EU countries are to apply. The survey is available on FEE's website or directly from FEE.

D REGULATION

22 This section summarises the main policy decisions which the FSA regulators have made regarding the introduction of the euro, and lists the guidance they have issued on EMU.

23 Reviews of all the various regulations have indicated that few substantive changes are necessary to accommodate the introduction of the euro. The regulators' emphasis is on ensuring that firms continue to comply with existing rules, and that they adapt to the euro without disruption to the smooth operation of their business. Thus IMRO, SFA, the Building Societies' Commission and the Friendly Societies' Commission have written to their regulated firms to remind them of the need to continue complying with regulatory obligations and make adequate preparations. IMRO has said that it will seek confirmation in the autumn that firms are doing so. For the various SROs and the Bank of England, EMU will be a topic for visits and a factor in their risk assessment of firms.

24 EMU is seen as a form of operational risk and will affect each firm differently. So regulators cannot give exhaustive guidance on how EMU affects compliance with existing rules. It is up to each firm to consider how they will need to prepare for the euro – a thorough business audit is required. However, a number of regulators have issued general guidance on euro preparations, including the following, which contain analyses of issues that firms will need to consider. A selection of them is available on IMRO's website.

- SFA Board Notice 442 (October 1997)
- IMRO Reporter issues 19 (December 1997), 20 (March 1998) and 21 (June 1998)
- PIA Regulatory Update 48 (March 1998)

25 In addition, the following specific policy decisions have been made on the application of existing regulations to the euro.

Capital adequacy

26 The implications of the introduction of the euro for the capital adequacy rules are considered in SFA Board Notice 443 (October 1997), confirmed with amendments as Board

Notice 464; the Bank of England's *Impact of the euro on the capital adequacy framework* (October 1997); and in IMRO Reporter 20. The three documents are consistent with each other. The Collective Investment Schemes department of FSA has also pointed out that fund managers will have to consider a similar set of issues in order to comply with the regulations on efficient portfolio management.

27 The main point of the guidance is that the conflation of several currencies to one will alter the risk profiles, and hence the capital adequacy treatment, of a number of products, most notably some cross-currency derivative contracts where both currencies will be replaced by the euro. In these cases, capital charges for market risk will be greatly reduced. But there will be a need for yet greater vigilance in the assessment of the relative creditworthiness of issuers. Such contracts will continue to be treated as derivatives for capital adequacy purposes until maturity.

Client money

28 IMRO considered the application of client money rules to redenomination in issue 21 of the IMRO Reporter (June 1998). SFA has written to firms it regulates in similar terms. IMRO confirmed that firms should treat any cash payments resulting from redenomination as client money, and therefore that appropriate segregated account and payment arrangements should be made. Where depositories do not pay out cash amounts below any *de minimis* level, firms themselves will have to make good those amounts. However, where amounts involved are small, firms can hold them temporarily, and net them off against fees and commissions owed from clients. Where firms believe that they cannot comply, or have alternative solutions consistent with regulatory principles, they should contact their regulator to discuss the matter.

Collective investment schemes

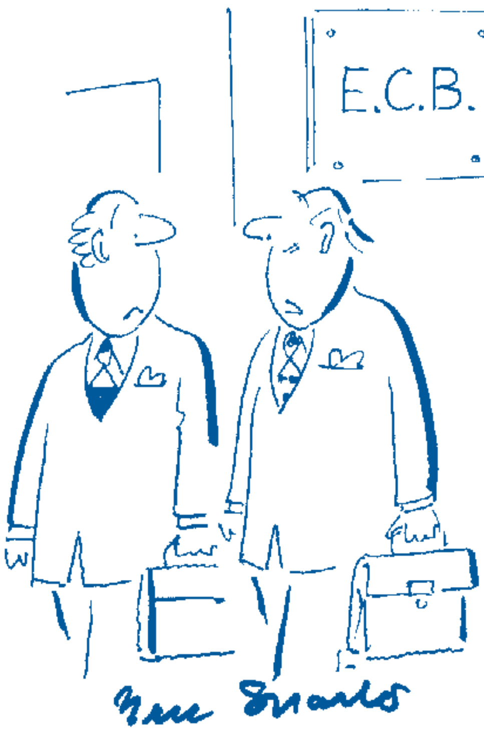
29 The Collective Investment Schemes Department of the FSA published their assessment of the implications of the euro on the product regulations for authorised unit trusts and open-ended investment companies (OEICs) in issue 21 of the IMRO Reporter (June 1998). No major changes to the regulations are necessary; but the following points emerged.

- While the UK remains outside EMU, a positive resolution of unitholders will continue to be required to change the base currency of an authorised unit trust, including to change it into euro. Similarly, the class rights of holders of separate share classes in an OEIC cannot be varied without the sanction of a resolution passed at a class meeting, and this would apply to a change in currency.
- Annual reports of authorised funds must contain a comparative table showing a performance record over the last five years. For any funds with a base currency which is converting to euro, performance data must be expressed in a way which does not confuse or mislead. Managers would be expected to show performance in a way which is meaningful and in line with regulatory standards.

30 Issue 22 of the IMRO Reporter, which is to be published shortly, will include details of special procedures for the suspension of dealing in authorised unit trusts and OEICs one business day either side of the conversion weekend. The FSA accepts that there may be good investor protection reasons why unit trust managers and the authorised corporate directors of OEICs may decide to suspend the issue and redemption of units, or shares, on 31 December 1998 and

4 January 1999. Normally, such a decision would require immediate notification to the FSA, any relevant Self-Regulating Organisation (SRO), and the authorities in each Member State in which the fund is being marketed, stating the reasons for suspension. A similar process is then required when dealing resumes.

31 The FSA has agreed to a streamlined procedure for notification in EMU-related cases, involving writing, faxing or e-mailing notice to the FSA prior to suspension, briefly stating the reasons and the date on which it is expected dealing will resume. EU regulations require that a copy of the notice must also be sent to the authority in any Member State in which the fund is marketed. When dealing recommences, no further notification would be necessary, provided that the suspension is lifted on the date indicated.



I DREAMED I WAS TOLD TO SELECT AN INTEREST RATE TO SUIT GERMANY EIRE AND THE T.U.C.