

The Money Market in France

In December 1985, new money market arrangements were introduced in France,¹ the first major change in this field since June 1967.² There were now to be two markets: (1) the inter-bank market (*le marché interbancaire*), which comprehended three groups of institutions — (a) the *établissements de crédit* — the big banks (*les grands établissements*), the regional and local banks, the mutual and co-operative banks (e.g. the *Crédit Agricole*), the savings banks, the *caisses de crédit municipal*, the *sociétés financières*, and specialised institutions like the *maisons de réescompte* and *banques de trésorerie* (the latter are usually small subsidiaries of large banks and, being small, able to adopt flexible policies), and various other specialised institutions (like the *Crédit National* and the *Crédit Foncier*) — as at December 31, 1985, there was a total of 2,059 such *établissements de crédit* in France; (b) a group of five institutions comprising the Bank of France, *le Trésor public* (the State Treasury), the *Caisse de Dépôts et Consignations*, and the two central bank institutions for overseas territories (e.g. in the French *départements d'outre mer*), but not the financial services of the Post Office; and (c) the *maisons de titres* (houses dealing in securities) of which there were 67 at that date, or a total for (a), (b) and (c) of 2,131. These constituted the “professional” operators in the money market. Other institutions that were previously included in the interbank market were phased out progressively; these included the insurance companies, pension funds, stockbrokers, and unit trusts; (2) there was a “new” short-term market in negotiable securities, which was open to all comers, including all those qualified to participate in the inter-bank market, industrial and commercial corporations with treasury requirements

¹ See *Réglement no. 85-17 du Comité de la réglementation bancaire* signed on December 17, 1985 by the Minister of Economy and Finance.

² *Décision de caractère général* No. 67-10 taken by *Conseil national du crédit* on June 28, 1967.

to accommodate, insurance companies and mutual funds, also wealthy individuals. In particular, it comprehended all money market operations between banks and other parties, and between the other parties themselves. It covered stocks and shares, also short-term bonds (*les valeurs mobilières*) and *titres de créances négociables* (negotiable instruments like certificates of deposit, commercial paper, *Bons du Trésor* or Treasury bills), and the bonds or securities of the IFS (*institutions financières spécialisées*), the first such issue being made on January 20, 1986.

Money market instruments

Before proceeding further, it is pertinent briefly to describe the several money market instruments that are available for investment and trading.

Before the beginning of 1986, *Bons du Trésor* (Treasury bills) could only be bought by banks. *Bons du Trésor à taux variable* are still only issued to banks. They are issued through auctions arranged weekly by the Bank of France with maturities of 3, 6, 9, and 12 months on a discount basis. The rate paid on these *Bons du Trésor* is indexed against the rates paid in the money market — it varies from day to day and depends on the *taux d'argent jour à jour*, interest being added to the principal sum every day. The maturities are chosen at each auction or tender — it depends on the needs of the Treasury; it makes the decision. *Bons du Trésor à intérêts annuels*, *i.e.* Treasury notes with annual interest, are issued for maturities of between one and seven years. They are quoted on a bond yield basis. In addition, *Bons du Trésor* may be issued to *établissements de crédit*, individuals and the non-financial sector (*i.e.* to members of the “new” market) on a *taux fixe* (fixed interest) basis as *bons sur formules*; they are issued through the “tap” (*par robinet*) by the Bank of France. Banks — it should be noted — may also buy them; they would tend to buy them when rates were fairly high and in the expectation that there might be a fall in rates. *Bons du Trésor* at a variable rate could only be taken up by *établissements de crédit*. As the French Government's deficit has increased issues of *Bons du Trésor* have also increased greatly. At end-1988, *Bons du Trésor* in

issue totalled FFrs. 450 milliard.³ All *Bons du Trésor* are held in current account (*comptes courants*) at the Bank of France — they have no physical existence being merely figures in the computer at the Bank of France. About 80 per cent of the *Bons du Trésor* issued are bought by banks — mostly *à taux variable*. There is a developed secondary market in them, where about 15 brokers quote prices; two of them operate through an inter-dealer broker system⁴ comparable to those which are in place in London and New York. This market is used by banks particularly when they fail at the auction to get the *Bons du Trésor* that they want. Then they would go either to the other banks or to specialised institutions like the former *maisons de réescompte* (discount houses).

There is now an auction or tender in *Bons du Trésor*, the first auction taking place on January 3, 1986. Tenderers put in a range of prices for each auction in descending order of magnitude (to two decimal places) — the Treasury accepts the highest bids (*i.e.* the lowest yields). The relevant form on which the banks apply carries the number of the account of the subscriber. The coming auction is advised in advance on a Tuesday, with the auction taking place on the following Monday. On the Monday morning (before 14.00) the banks submit their bids to the Treasury, though brokers will have estimated what the various prices will be for the several maturities and have worked out a “*fourchette de prix*”, or range of prices. The banks then decide upon which prices to bid. Bids may be put in direct to the Treasury, or through a broker, who will make no charge — it is a service furnished gratis.

Brokers (of which there are about 10 that are active) make their profits from commissions as a broker in the secondary market for *Bons du Trésor*, where there are discounts for volume (the big banks because of the size of their transactions pay less than the smaller banks). The broker's job is to establish a price between buyer and seller, on which they will agree. On a normal day in the secondary market, turnover is of the order of FFrs. 3 milliard, but it may go up to FFrs. 5 milliard. But there are quiet days as well and turnover may be as low as FFrs. 500 million. The market opens at 9.30 a.m.

³ See BANK OF FRANCE, *Bulletin Trimestriel*, No. 69, December 1988/January 1989, Table 7.

⁴ This is a system where prices and quantities are put on a screen by the broker on behalf of the party that is quoting. Such prices and quantities are firm quotes.

and runs through to 6.00 p.m. every day, except Saturdays, Sundays, and holidays.

Certificates of deposit whether in French francs or in foreign currencies could be issued by banks as from March 1, 1985. Reserve requirements apply — 2 per cent for liabilities for an initial term of less than 2 years.⁵ Initially, the minimum amount that could be issued was FFrs. 10 million; the minimum now is FFrs. 1 million,⁶ with maturities of from 10 days to 7 years (originally, the maturities for French francs ranged from 6 months to 5 years, and 2 to 5 years for CDs in foreign currencies including ECUs). They are issued at a fixed rate by banks mainly to non-financial corporations. By end-1988, some FFrs. 310 milliards of CDs were in issue. There is only a very thin secondary market, though certain banks are prepared to offer two-way prices.

The first issue of commercial paper (*billets de trésorerie*) in France was on December 18, 1985.⁷ It serves a similar purpose to the long-established use of commercial paper in the USA. The minimum size at issue was FFrs. 5 million (reduced in 1988 to FFrs. 1 million to assist smaller companies) and initial maturities ran from 10 days to 180 days. It is issued at a fixed rate. Usually, it is issued for from 10 to 40 days. The banks provide back-up lines of credit (no less than 95 per cent of the outstanding paper) and the big banks are the main intermediaries, money market intermediaries in this context being only of marginal importance.⁸ Mainly established non-financial corporations issue such paper, but this might also include large agricultural co-operatives. Some paper is credit-rated following the setting up of a credit agency (ADEF - *Agence d'évaluation financière*) with the assistance of the *Crédit National*. This was effected in April 1986. It was suggested that a second private agency should also be established. By end-1988, about FFrs. 70 milliard of commercial paper had been issued. Again, there is virtually no secondary market, but it is purchased readily by other non-financial corporations and

⁵ And 5 per cent applies for terms of less than 10 days; 1 per cent for *comptes sur livret* — as from July 21, 1987.

⁶ Corporations are said to like the FFrs. 5 million size, but transactions may often be for from FFrs. 5 to 10 million.

⁷ See F.-J. CRÉDOT in *Banque*, June 1986 and P.L. BORDENAVE, H. DE BOYSSON, and M. KONGZATY in *Banque*, August/September 1986.

⁸ BNP, Société Générale, and *Crédit Lyonnais* handling about two-thirds of the issues, and BNP, Société Générale, *Crédit Lyonnais, Paribas*, and the *Banque Française du Commerce Extérieur* more than three-quarters — see *Banque* No. 464, August/September 1986, p. 735.

by institutional investors like insurance companies and pension funds, also unit trusts (*SICAV*).

Although not strictly a money market instrument, one might also mention the bonds issued by the specialised financial institutions (IFS) like the *Crédit National*, the *Crédit Foncier*, regional development agencies, and the *Comptoir des Entrepreneurs*. These have been available since December 1985. They have maturities of from 10 days to 7 years, the minimum amount is FFrs. 5 million; they may attract a fixed or variable rate; and they are held in safe custody at the Bank of France.

Although initially the several money market instruments had maturities (maximum and minimum) which varied somewhat, they have now all come into line and range from 10 days to 7 years.

On the external side, French banks have a very active interest in Euro-dollars. Following the relaxation of market rules from the beginning of 1987,⁹ there has also been a steady development of the Euro-franc market, especially for bonds. Euro-currency operations (primarily Euro-dollar, but including the Euro-franc) tend to be centred on London, though some business is also done in Brussels and Geneva. There is less and less done in Euro-sterling. Swaps are often effected between foreign and domestic books within a bank. Interest rate swaps are also common.

The inter-bank money market

The core of money market activity in France is the inter-bank market in balances with the Bank of France, much of it being done through brokers but some of it direct between banks. Loans may be made unsecured (*en blanc*), when no paper is delivered. If a loan is collateralised, it would be an *en pension* transaction. Being central bank money, it is available the same day. As already indicated, French banks have to maintain certain reserves against their several kinds of deposit liabilities and it is therefore necessary to manage carefully a bank's money position over the course of the day and with a view to maintaining an appropriate average over the month.

⁹ See *Financial Times*, 5/11/86.

The *réserves obligatoires* as imposed by the Bank of France are a very relevant element in controlling bank liquidity. Such reserves apply to virtually all resident deposit liabilities with a maturity of less than 2 years.¹⁰ *Opérations de reméré* are also covered, a *reméré* being a sale of *Bons du Trésor* under an agreement to repurchase. Since August 1987, reserves have been calculated on the basis of an average daily figure from the 16th of one month to the 15th of the next month. Over this period, banks can either run above or below their requirement so long as they maintain that requirement on an average over the whole month. How they manage their money over this period will depend on the liquidity of the market and related interest rates, also on their own expectations with regard to interest rates. In other words, a bank may take a position with regard to interest rates.

The day will usually begin about 8.30 a.m. with an exchange of information between the leading banks, which would open for inter-bank business at 9.00 a.m. All relevant information is centralised in the hands of a bank's Treasury, including for banks with widespread branch networks figures from the numerous local branches *en province* of the Bank of France. This is necessary since the branches of big banks *en province* would conduct their inter-bank business through the local branches of the Bank of France. These figures would be available by 11.30 a.m. For the big banks, this information would be supplemented by details of big movements of money from their own branches and these would come in by midday (by telephone confirmed by telex). Furthermore, large corporation customers would be expected over the course of the day to advise any big movements of money that were contemplated, whether in or out of their account. In the case of a term deposit, the corporation concerned would give notice. Generally speaking, a bank would know its position fairly certainly by 3.00 p.m., but activity may go on through to 5.00 p.m. or 5.30 p.m. Actually, the inter-bank market is most active from 10.00 a.m. to noon and again from 3.00 p.m. to 5.00 p.m. Should the banks have surplus money, which they do not wish to lend out inter-bank, they may buy *effets commerciaux* (commercial bills) or *Bons du Trésor*, but not very much in CDs. Sometimes, in the big banks, the bank Treasury is also responsible for the bank's bond portfolio, where operations will tend to reflect

¹⁰ There are certain exceptions; see BANQUE DE FRANCE, *Le système des réserves obligatoires*, Note d'information No. 77 (1), April 1988, p. 7.

both the bank's own needs and its expectations with regard to interest rates.

On the basis of its money position at the end of the day, banks used to have a morning "fixing" of the interest rate on day-to-day money, which provided the basis for other rates. The "fixing" was based on a balancing out of the several banks' borrowing and lending of the day before (this was the purpose of the exchange of information after 8.30 a.m.). The fixing took place for overnight/day-to-day money from 9.15 to 9.30 a.m., when the Bank of France itself might provide money to assist the positions of certain banks, though in those circumstances it might well have been necessary for the Bank of France to intervene again in the afternoon in order to correct the situation. Once the fixing had been made for day-to-day money, the banks would buy and sell money for the longer maturities, the longest being 12 years, though the market is very thin beyond 5 years.

It will be apparent that this system of "fixing" had its disadvantages. It took place early in the day on the basis of estimates that could not possibly foresee developments that might eventuate later in the day with related fluctuations in liquidity. It also failed to take into account differences in the creditworthiness of borrowers, though to some extent this could be accommodated by applying internal limits to such borrowers. Finally, the "fixing" tended to result in a certain rigidity of rates.¹¹

This system was the subject of reforms introduced by the Bank of France by an instruction (No. 5-86) of November 25, 1986, the main measure introduced (as from December 1, 1986) being the suppression of the "fixing". Thereafter this permitted the possible variation of rates over the course of the day. But since the rate determined at the "fixing" had formerly been a point of reference for other rates — some of them long-term — the Bank of France now calculated a weighted average of operations in day-to-day money over the course of the day, which was announced the following day at the end of the morning. Clearly, because of existing institutional arrangements, some kind of reference point had to be retained.

As already indicated, the inter-bank money market is limited to banks and to banking-type institutions like the *Caisse des Dépôts et*

¹¹ See A. ICARD, "La réforme du marché interbancaire", *Banque*, January 1987, p. 78.

Consignations, the *Crédit National*, the *Crédit Foncier*, etc. Of the more than 2,100 institutions that qualify, however, only 200 to 230 would be active and no more than 25 would qualify as *opérateurs principaux du marché* (OPM), chosen as the most active in the inter-bank market by reason of their size or specialisation. Expertise and a minimum capital are also relevant. It is through these institutions, too, that the Bank of France would operate when intervening in the market.

As we have seen, the commodity dealt in in the inter-bank market is balances at the Bank of France, which is same day money. There are no clearing house funds in France; in other words, all clearings are effected through accounts at the Bank of France. This is as true of longer dated money (whatever its maturity) as of day-to-day money. Also, a large number of inter-bank transactions go through brokers (many of whom are brokers in other instruments as well as money),¹² of which there are 31 that are recognised, 10 of them being really active. The big banks would use several brokers. The bulk of the transactions would be secured — say, 95 per cent — resorting to the French *en pension* arrangements (which are in the nature of a sale and repurchase agreement); only about 5 per cent would be *en blanc* (unsecured). The basis of the *en pension* transaction is usually *Bons du Trésor*; *effets commerciaux* (commercial bills) are used less and less. Where *effets commerciaux* are accepted *en pension* they are not transferred physically from the borrowing bank to the lending bank — they remain in the *dossier* of the borrowing bank (*effets sur dossier*). Only a memorandum of entitlement is exchanged. No particular maturity is “normal”, but it is usually less than 3 months (it could be longer); the average maturity would be less than 1 month.¹³

The bulk of the money lent and borrowed would be overnight (*i.e.* day-to-day), but deals are also done in “period” money. Thus, money may be borrowed (again *en pension*) for several days, or a week, or indeed for any period up to 12 months. For the really big banks, inter-bank loans would be unsecured (*en blanc*); otherwise loans for up to 12 months would be done *en pension*. The most common periods — apart from overnight — are 1 to 2 weeks, 1 to 3

¹² These *courtiers* are also described as *agents des marchés interbancaires* (AMI). They do not always operate in foreign exchange (FOREX).

¹³ *Effets commerciaux* may be trade-related or finance paper; both kinds of paper are employed. They may also be bought and sold, but there is only a very small secondary market.

months, 6 months and 12 months. For over 12 months money, the banks would resort to *billets à ordre négociables* (BONs), which are bank promissory notes (PNs) that can also be bought and sold in a secondary market. Such loans against bank paper in PN form are really unsecured (*en blanc*).

There is also a longer term base in the money market, where loans may be made against mortgage paper up to 15 to 18 years (usually, it is for 10 to 15 years). This part of the money market, where transactions are all done *en pension*, is not very active.

In the inter-bank market, banks will tend to be borrowers on one occasion and lenders on another, depending on movements in their liquidity, though on the whole they will tend to be net borrowers (which means that the Bank of France will have to put money into the market — see below). Only the *Caisse des Dépôts et Consignations* is almost always a net lender — it still has large liquid funds to deploy; this also used to be true of the *Caisse Centrale de Crédit Agricole*, but this is less true today as it has developed a very sizeable lending business of its own and is now virtually a large commercial bank with a greatly expanded level of business and itself in great need of funds to deploy. It tends to borrow on a day-to-day basis, but is a lender at term. One should remember, too, that the former *maisons de réescompte* are part of the inter-bank market; they borrow and lend and, indeed, often “take a position” in money, which brokers may not do. The former *maisons de réescompte* operate as “*banques de trésorerie*” and arbitrage in much the same way as the money market room of a big bank¹⁴ but being smaller they can be more flexible. Indeed, the big banks have their own *banques de trésorerie*, as subsidiaries, which being smaller than the parent bank can also be more flexible.

The government bond market

Because at the short end the market for French Government bonds impinges on the money market, reference must also be made

¹⁴ Both might go “short” or “long” depending on interest rate expectations. Thus, banks may borrow and lend at the same time, but for different maturities.

to the changes that have occurred in this sector as well. About the beginning of 1987, a number of innovations were introduced. At the end of 1986, the French Ministry of Finance named 13 primary dealers¹⁵ — *Banque d'Escompte*, *Banque Indosuez*, *Banque Nationale de Paris*, *Banque Paribas*, *Caisse des Dépôts et Consignations*, *Caisse de Gestion Mobilière*, *Caisse Nationale de Crédit Agricole*, *Crédit Commercial de France*, *Crédit Lyonnais*, *Finance Contrepartie*, *Finance Plus*, *Banque Morgan*, and *Société Générale*¹⁶ — which were to maintain competent teams of dealers and to quote two-way prices whatever market conditions might develop; otherwise they would have to face the wrath of the authorities and the probability of being de-listed. Spreads between buying and selling prices narrowed significantly as a wave of reforms was implemented in order to deregulate the system and greatly to reduce previously existing rigidities. The primary dealers were also to keep the Treasury informed on market developments, take a regular part in the placing of government debt, and — as indicated — make continuous two-way prices across the full range of government securities, including both Treasury bills and government bonds.

The primary dealers were selected on the basis of their activity in the government debt markets over the previous three or four months as well as on their technical skills. Banks which had taken an "intellectual" lead in the development of the Paris financial markets (such as the creation of the new financial futures exchange or MATIF) were favoured. In addition, the French Treasury wished to achieve a range of skills in the market and chose four smaller operators which it thought had the capacity to develop. They were asked to increase their capital resources over the following two years. As well as the four leading commercial banks — *Banque Nationale de Paris*, *Crédit Lyonnais*, *Société Générale*, and *Crédit Commercial de France* — the two major investment banks — *Paribas* and *Indosuez* — and semi-public institutions like the *Caisse des Dépôts et Consignations* and the *Crédit Agricole*, two of them — the *Banque d'Escompte* and the *Caisse de Gestion Mobilière* — belonged to the

¹⁵ See "The Big Bond Road Show", *The Banker*, August 1987, pp. 70-72.

¹⁶ By March 1988, the French Treasury had named two new banks as "correspondent brokers" in the Paris government bond market; these were *Caisse Centrale des Banques Populaires* and *Bankers Trust of the USA*; they were expected to become full primary dealers by the end of 1988. Meanwhile, *Finance Contrepartie* had withdrawn; the Treasury also indicated that it might demote some of the existing primary dealers if they had failed to live up to expectations.

group of traditional discount houses with an expertise in the bill market, but little previous exposure to government bonds. One was a foreign bank — *Banque Morgan* — which had long had a base in Paris. Midland Bank S.A. also joined the list. By December 1987, an inter-dealer broker to assist in ensuring market liquidity had been set up (jointly owned by the primary dealers), when the dealers could also begin to borrow and lend stock amongst themselves. There is now a second inter-dealer broker.

The French government debt market (including *Bons du Trésor*) has increased dramatically in size over the past five years or so and now dominates the fixed interest markets as a whole. Some bank instruments are in fact quoted not on an absolute basis, but as a spread over the rate on *Bons du Trésor*. In the bond market, government debt accounts for about 30 per cent of outstanding issues, but for as much as two-thirds of turnover. Bonds are issued with maturities of 7 to 15 years on the first Thursday of the month using the same auction method as with *Bons du Trésor*. In this context, the primary dealers have an advantage over other financial institutions, since they are allowed to submit "non-competitive bids". Besides bidding for government securities in competition with other institutions, they are entitled to receive 20 per cent of the amount they bid for at the average price of the last three auctions. Very soon the dealers making prices through the Reuters screen system were generating nearly half of the FFrs. 40 milliard of transactions in French government bonds each week and this hold on the market has continued to grow, primary dealers now handling from 75 to 80 per cent of the transactions on the primary market for Treasury paper and 70 to 75 per cent of the total on the secondary market, though rising yields — and capital losses — created some problems. The object of these and related developments is to make Paris the premier financing centre in Continental Europe.

Financial futures — the MATIF

Meanwhile, a *Marché à Terme des Instruments Financiers* (the MATIF) had been set up in February 1986.¹⁷ It is now called the

¹⁷ For greater detail, see FRANCINE ROURE, *Les Mécanismes du MATIF*, Paris 1988.

Marché à Terme International de France (and still the MATIF). Trading started on the basis of a FFrs. 500,000 nominal 10-year 10% State bond futures contract and turnover grew dramatically. Then came a short contract based on a 13-week Treasury bill; this was established in June 1986, but was rather slow to take off. In Paris — unlike the early days of LIFFE in London — speculation was a central element behind activity and this complemented the hedging and covering business provided by bond dealers. In line with the brisk start to business, the number of floor members of the futures market grew quickly. These included 44 stockbroking firms and 21 banks and financial institutions including the *Caisse de Dépôts et Consignations*. However, only five banks — *Banque d'Escompte*, *Banque Nationale de Paris*, *Paribas*, *Crédit Lyonnais*, and *Société Générale* — played a really active role in the early stages. Others preferred to wait and see. By January 1987, there were 88 members (but with 90 per cent of all business being done by only 33 of them)¹⁸ and growth was such that its Clearing House had to move to new premises. Within that first year, daily volume in the notional contract averaged well over 15,000 contracts a day, with trading peaks of over 40,000 contracts. Indeed this long bond contract has become the price to watch in the French bond market.

Within a year, the MATIF introduced two further contracts — a private index called OMF 50 (on July 21, 1988)¹⁹ and an option on its main long bond contract (on August 20, 1988). It was said that the private contract seemed to be more liquid than the official one.

The opening of the official options market followed the development of a fairly active over-the-counter (OTC) market in negotiable options on the government bond contract. Expiry is identical to the four quarterly expiries of the underlying government bond contract — March, June, September, and December. Five market-makers were appointed by the Clearing House for the new contract — *Société Générale*, *Banque Paribas*, *Banque Indosuez*, *Crédit Lyonnais*, and BGPSIB, a joint venture between two smaller banks, *Banque de Gestion Privée* and *Société Internationale de Banque*. They ensured there was sufficient liquidity and were

¹⁸ See *Financial Times*, 27/1/87.

¹⁹ OMF 50 was launched by OMF, which is a French subsidiary of OMS (Option Market Sweden). Now several of the big banks — *Crédit Commercial de France*, *Banque Nationale de Paris*, *Paribas*, and *Société Générale* — are also shareholders of OMF, as is a broker *Finacor*.

responsible for the smooth running of the new market, particularly as regards the execution of clients' orders. Latterly (July 1988), the margin on Treasury bond futures was cut from 5 to 4 per cent of the 10-year bond contract's face value — FFrs. 500,000 — to reduce the margin in cash terms from FFrs. 25,000 to FFrs. 20,000. Subsequently (August 1988), in order to counter emerging competition, the MATIF introduced a new stock index future open only to clearing members of the MATIF. The contract was based on the recently launched CAC 40 index. This was followed by a new short-term interest rate contract (September 1988) based on the Paris inter-bank 3 months offered rate (PIBOR 3 month) calculated daily by the French Banks' Association and already traded over the counter since June 1987. It was expected largely to displace the existing Paris futures exchange contract on Treasury bills, which had not proved to be a success; nonetheless, the Treasury bill contract remains in existence. As will be apparent, the MATIF now has much the same range of instruments as Chicago, New York, and London.

Intervention by the Bank of France

Bank of France intervention in the money markets may take three forms: (1) a procedure whereby the Bank of France invites tenders for money from the banks (*l'appel d'offres*); (2) the provision of accommodation on the basis of a *pension* (sale and repurchase agreement); and (3) outright purchases (or sales) of government securities on the open market.

(1) Making money available in response to tenders for funds is the means most commonly employed in supplying central bank funds to the inter-bank money market. As a matter of history, this means of intervention assumed importance once the Bank of France discontinued its discount function. The first *en pension* operations against *Bons du Trésor* and *effets privés éligibles* took place in 1969. And it was on June 21, 1973 that the first invitation to banks to tender for funds (*l'appel d'offres*) was made. But the latter innovation was associated more often with an outright purchase of securities than with an *en pension* transaction and, when the Bank of France bought securities outright, it would hold them in its portfolio until

maturity; with a *pension* the Bank of France would hold "title" only during the duration of the *pension*.

However, following the reforms of December 1, 1986, accommodation made available after an invitation from the Bank of France to tender for money (the technique of *l'appel d'offres*) was no longer based on outright purchases: *en pension* transactions were now preferred. Moreover, there was to be no delivery of the relevant securities (unless the central bank should require it); the transaction would merely be evidenced by a document for the total amount involved (by *billets globaux de mobilisation*), but the *pensions* would be based as before on *Bons du Trésor* or *effets privés*. So far as *Bons du Trésor* were concerned, this mattered little, since they were merely held as figures on a computer at the Bank of France (there was no physical delivery anyway), but non-delivery of *effets privés* would save much mechanical labour. Actually, not all *effets privés* (which include *effets commerciaux*, CDs, commercial paper, and the bonds of IFS) will be eligible. *Effets commerciaux* (which would constitute the bulk of *effets privés* comprehend a wide range of instruments. For the big banks, with a large commercial business, holding of *effets commerciaux* are large and a most convenient basis for *en pension* transactions; smaller banks would generally prefer *Bons du Trésor* as a basis, the borrowing bank having the discretion as to which kind of paper to employ.

Formerly, the Bank of France had a large staff, which sorted out what kinds of paper were eligible and what were not. This paper was kept in safekeeping at the Bank of France and — if banks borrowed against it — it was kept *en pension* within the Bank of France. Nowadays, the Bank of France admits the paper of any firm with a good reputation (this is done through the branches of the Bank of France where the bulk of this business is undertaken), paper being graded for quality between 1 and 5. Normally, there is not now physical delivery of the relevant paper when banks are borrowing against it.

The procedure in the present context is for the Bank of France to invite the *établissements de crédit* (i.e. those institutions that operate in the inter-bank market) to indicate the amounts of money they desire to borrow from the Bank of France and the rate of interest they are prepared to pay for it. This information is passed to the Bank of France through the OPMs, which assemble the details (without fee) before passing it on to the Bank of France for

processing and consideration as a whole. The Bank of France — at its discretion — then decides on the rate at which it will provide funds to the banks and the proportion of the total requests that will be accommodated. Usually the submissions made by the banks will represent a range of amounts and of rates; the amount the Bank of France will be intending to grant will generally be much lower and the rate chosen will in some sense be a median rate. The Bank of France response to a tender for funds would usually be given at 2.00 p.m. (on Mondays, normally at 1.30 p.m., because Treasury bill bids need to be processed) on the basis of submissions to the Bank of France made between 11.00 a.m. and 11.30 a.m. (if there is one *billet global de mobilisation*), or between 11.00 a.m. and 12.30 p.m. (if there are two *billets*).

(2) *Pensions* for a short period of days²⁰ were introduced on January 5, 1971, though previously accommodation had been made available *en pension* for one and three months against *Bons du Trésor*, bonds of the *Crédit Foncier de France*, and *effets privés éligibles* — this procedure was suspended several times and finally abandoned in March 1980. *Pensions à 7 jours* were used to quite a considerable extent between 1982 and 1984 at a time when the day-to-day rate in the inter-bank market was highly volatile. They were then abandoned until the reform of December 1, 1986, after which they were reactivated as "same day money" (previously the money could sometimes be for the next day). As a rule, the *pensions à 7 jours* money was made available at a rate about 1/2 per cent higher than the money for which banks tendered by *l'appel d'offres*. Since the summer of 1988, applications for *pensions* at the initiative of the bank concerned²¹ may be for 5 to 10 days and the rate may be 1/2 to 3/4 per cent higher than the rate on *l'appel d'offres*. Clearly, banks would be interested in such money when the day-to-day rate in the inter-bank market is higher than such Bank of France money and the banks believe it is likely to remain so for some days. For this reason, the inter-bank rate for day-to-day money is not likely very often, nor for very long, to be above the rate on *pensions à 5-10 jours*. In general, the inter-bank rate tends to be somewhere between the two

²⁰ Prior to August 1, 1988, there were *pensions à 7 jours*; subsequently, the period was for 5 to 10 days.

²¹ They can choose both the amount and — within the stated limits — the number of days, provided they will pay the rate.

Bank of France rates discussed above; hence these rates are often referred to as "*taux directeurs*".

But the main way of making money available to the market is by *l'appel d'offres*; though money by way of *pensions à 5-10 jours* is now resorted to much more than it used to be. Both kinds of money are made available *en pension*. Because *l'appel d'offres* is the main way of making money available to the market, its rate becomes the key intervention rate in the money market — the *taux d'intervention* — and it is therefore the rate that is watched; when it changes, it is clear that there has been something of a policy adjustment. It would usually be accompanied by a related change in the rate for *pensions à 5-10 jours*. It will also tend to be followed by a change in bank base lending rates. Sometimes, to protect the franc, the significant change may be in the 5-10 day *pension* rate.²² At other times, these rates may be lowered, albeit cautiously.²³

(3) Since December 1986, the Bank of France has also been prepared to operate in the open market with a view to influencing bank liquidity — it does this by purchases and sales of *Bons du Trésor* and at market prices. If the Bank of France is purchasing in the open market, this will tend to push rates down in the inter-bank market and, if it is selling, rates are likely to go up. Consistent with this, if there is excess liquidity and some "mopping up" is in order — which tends to be rare — the Bank of France will sell *Bons du Trésor*.²⁴ By way of contrast to the two other methods of operation, in the case of open market activity, policy is implemented by way of outright purchases or sales — not by way of a *pension*.

If the main emphasis was to be on open market operations of this kind, it would require a large market in Treasury paper and, despite a significant growth in such paper in recent years in France, the government securities market as a basis of open market operations remains rather limited. Nonetheless, open market operations in Treasury paper could amount to about 10 per cent of total Bank of France financing of the banks, so that such assistance is now more than marginal.

Hull

J.S.G. WILSON

²² For example, see *Financial Times*, 31/12/86.

²³ See *Financial Times*, 10/3/87 and 26/1/88.

²⁴ Very occasionally, also as a "mopping up" operation, the Bank of France has borrowed *en pension* — i.e., just for a day it has sold *Bons du Trésor* under an agreement to repurchase.