
Commercial paper markets: an international survey

This article⁽¹⁾ surveys the development of commercial paper markets worldwide: the first section discusses the pressures that have led to the increasing use of short-term marketable instruments, including euronotes and commercial paper; the second considers the available statistics; and the final section examines the structural features of the individual market centres.

Introduction

Since the beginning of the 1980s innovation and structural change have transformed the international financial system. One aspect of this transformation has been the increasing securitisation of international financial flows, which has led to negotiable securities such as bonds and FRNs, rather than direct borrowing from the banking system, becoming a more attractive means of international borrowing for many major borrowers. In addition to greater use of the medium and long-term bond markets, recent years have seen accompanying but rather less publicised developments in the use of some of the longer-established short-term instruments, such as commercial paper, as well as the emergence of euronote and eurocommercial paper markets. There has also been an increase in the use of bankers' acceptances, which involve direct borrowing from the banking system but which also create tradable short-term paper.

Commercial paper (CP) is a short-term instrument consisting of unsecured promissory notes with a fixed maturity, typically between seven days and three months, issued in bearer form and on a discount basis. Issues can be made on an occasional basis or, more generally, under a medium-term revolving programme, with maturing short-term paper, if funds are still required, being met by a new issue. Paper may be issued by many types of borrower, including industrial and commercial companies, bank holding companies and, in some cases, subsidiaries of foreign-owned companies. It is either sold directly by the issuer to investors, who are mainly institutional (such as money-market funds, insurance companies, corporations, bank trust departments, pension funds), or placed by an intermediary bank or securities dealer.

CP differs from other short-term money-market instruments such as bankers' acceptances in that it is an obligation of the issuer only, whereas acceptances are an obligation of both the drawer and the accepting bank (which adds the guarantee of a second name to the paper). Another difference is that issues of CP do not have to be tied to specific trade transactions, which is in many circumstances the case with acceptances.

CP is a long-established instrument in the United States (where it dates back to the nineteenth century) and in Canada, and in the last few years has been introduced in a number of new markets, including Australia, Spain, Hong Kong, Sweden, Singapore, Norway, France, the Netherlands and the United Kingdom. There are also indications of interest in markets in Japan, Germany and Turkey. The US market is by far the largest and in late 1986 accounted for \$323 billion of the \$359 billion of issues outstanding in all national CP markets; in addition, issues in the euronote and eurocommercial paper markets (mainly US dollar denominated issues in London) have been estimated at around \$35 billion. For purposes of comparison, outstanding acceptances (in the United States, Canada, the United Kingdom and Australia) were around \$130 billion and outstanding issues of international fixed-rate bonds and floating-rate notes (FRNs) around \$750 billion. Five years earlier, CP was being issued in only three centres—the United States, Canada, and Australia—and outstandings were only around \$170 billion.

The emergence of new CP markets and the growth of existing markets owe much to many of the factors that have in recent years led to greater use of other securitised instruments. Foremost among these is the changing regulatory environment, particularly the worldwide tendency towards the reduction of structural rigidities and barriers to competition. As a result it has become possible to issue an increasingly wide range of instruments in an increasing number of national markets. In many cases there has been official encouragement of the use of new short-term instruments as an aid to corporate borrowers. At the same time, supervisors' concerns over capital adequacy and financial intermediaries' own desire to increase their return on assets have encouraged a turn to more fee-earning business, into which category the arrangement of commercial paper issues fits. The emergence of large, sophisticated, multinational intermediaries whose business is the arrangement of securities issues, and who are familiar with the highly-developed US CP market, has further encouraged use of the instrument outside the United States.

While the promotion of CP and other marketable instruments by intermediaries has undoubtedly been an

(1) Written by S L Topping in the Bank's International Division. The author is grateful for comments received from a number of national authorities but takes full responsibility for any errors that remain.

important factor, there have been equally strong pressures from both issuers and investors. Issuers, aware of investors' perceptions of a decline in the creditworthiness of some banks (which has reduced or eliminated the banks' comparative advantage in raising funds), have sought funds directly, and more cheaply, from investors, without sacrificing any of the flexibility nowadays offered by the range of facilities available from banks. CP offers the possibility of lower borrowing costs; is simple and flexible (as maturities can be tailored to match cash-flow); provides an opportunity to diversify sources of borrowing; requires in general very little documentation; and publicises the borrower's name in financial markets (which may in due course make it easier to mount a longer-term capital markets issue).

Investors, for their part, have increasingly preferred to purchase marketable assets rather than to make deposits with banks, and CP has offered a higher-yielding alternative to Treasury bills or similar instruments, with flexible maturities and the anonymity of a bearer instrument. Banks have also preferred to acquire marketable assets rather than to make loans, as a potential way of improving liquidity. Part of the reason for the change in investors' preferences is that, as a result of the change in the pattern of net international financial flows over the last few years, investors who have a strong preference for investing in tradable paper have come to the fore as suppliers of funds at the same time as borrowers familiar with borrowing in this way (from the United States and some other developed countries) have become the major takers of funds. New technology has also contributed to this disintermediation from the banking system, as it has increased investors' access to information and thus reduced another of the banks' comparative advantages. Rating agencies, which provide some measurement of credit risk, and clearing systems, which smooth the handling of issues, have extended their services to the international markets.

In spite of these common features, the development of CP has to some extent differed from centre to centre depending on the nature of the existing national financial markets and banking system. The attraction of issuing commercial paper clearly depends in large part on the availability of alternative forms of short-term borrowing and their relative costs. In centres where there are compulsory reserve requirements on bank intermediaries, commercial paper issues will tend to be cheaper than, and therefore to substitute for, short-term bank borrowing. When there are no compulsory reserve requirements, the scope for CP is correspondingly more limited. In some centres CP counters, to a certain extent, inflexibilities in the banking system. In others, particularly those where low-cost bank finance is already available through the bankers' acceptance market, its role is less clear; nevertheless, it enlarges the spectrum of available forms of borrowing and provides a cheap and flexible alternative to the more expensive forms of bank finance.

Statistics

A considerable amount of statistical information is available on the US commercial paper market. Statistics on most other markets are at present limited—a consequence of the relative newness of the majority of these markets. However, it is hoped that statistics on euronotes and eurocommercial paper and on newly-emerging CP markets (as well as on a number of the other newer financial instruments) will in future be collected systematically as a result of the efforts of central bank statisticians to pursue the statistical recommendations of the Group of Ten central banks' study group report on *Recent innovations in international banking*, published in April 1986 by the Bank for International Settlements.⁽¹⁾

There are several deficiencies in the available statistics. First, although the Bank of England has for some years compiled figures for euronote facilities, which have been published in the regular commentary on international financial developments in the *Bulletin*, these statistics measure the value of programmes put into place and not the value of paper actually issued. Second, with CP becoming an *international* borrowing medium, it is frequently impossible to identify the extent of foreign or cross-border issues in each centre, which makes it difficult to quantify 'international' borrowing in each centre as opposed to domestic borrowing. Third, there is little information about the identity of holders of short-term paper; to the extent that it is held within the banking system it is covered by the international banking statistics compiled by the BIS and the IMF, but, since such holdings cannot be separately identified, it is not possible at present to estimate holdings outside the banking system nor, therefore, a comprehensive credit aggregate. Neither is there a geographic breakdown of issuers.

What is clear from the available statistics is that no other centre has a CP market that can begin to rival in size and importance the US market, where outstandings amount to some \$323 billion. The only other long-established market, in Canada, is the second largest, at US\$11.4 billion. Of the newly-emerging markets the largest are in Sweden (\$7.4 billion), Spain (\$5.4 billion), Australia (\$4.3 billion) and France (\$4.0 billion). The markets in the United Kingdom, Hong Kong, Singapore, Norway and the Netherlands are, at present, fairly small.

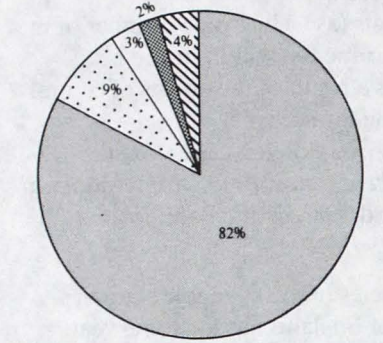
Worldwide commercial paper issues

The \$359 billion of outstandings in national markets, with the perhaps \$35 billion of euronotes and eurocommercial paper in issue, bring the total of worldwide commercial paper issues to \$394 billion (Chart 1 and the table). Much of this total, however, represents domestic rather than cross-border lending. At present, although many markets permit issues by the local subsidiaries of foreign-owned borrowers, only the US market (and, by definition, the 'euro' market) have sizable issues direct by foreign borrowers, in part because some countries' exchange

(1) The report is summarised in the June 1986 *Bulletin*, pages 209–10.

Chart 1
Comparative size of commercial paper markets

Late-1986 outstandings



controls prohibit the raising of funds in the domestic market for use outside the country. Issues by borrowers located outside the United States have in recent years been one of the US market's fastest-growing sectors and now amount to nearly \$38 billion or 12% of the total market. There are also sizable issues by the US subsidiaries of foreign borrowers. In nearly every other CP market domestic issuers dominate. However, as the newer markets develop, they may also entertain foreign borrowers.

Worldwide commercial paper issues

Late 1986 outstandings; \$ billions

Market	Outstandings (\$ billions)
United States	322.7
of which, foreign issues	37.8
Canada	11.4
Sweden	7.4
Spain	5.4
Australia	4.3
France	4.0
Hong Kong	1.2
United Kingdom	1.0
Norway(a)	0.9
Singapore(a)	0.3
Netherlands	0.3
Sub-total	358.9
Euronotes and eurocommercial paper	35.0
Total	393.9

(a) Estimate based on value of facilities arranged.

The US market is very much the model for the euronote and eurocommercial paper markets and for most of the new domestic CP markets. However, most differ in at least some respects from the US model because they have evolved differently or because the nature of the domestic capital market and other local conditions have made slightly different market practices more appropriate. Another influence is the degree of enthusiasm for the market felt by the financial sector—especially commercial banks, who may view CP as an unwanted competitor. The local differences—which relate principally to the range of eligible issuers, whether issues should be rated, and whether the borrower should have in place a guaranteed liquidity line against his issues—may persist as the

various markets become more established, but it seems more likely that, although some differences will remain, market practices will become more standardised (as has happened in the euronote and eurocommercial paper markets).

United States

The US commercial paper market dates back to the early nineteenth century.⁽¹⁾ It began as a way of enabling industrial and commercial firms with demands for working capital to raise such funds out of state. This was necessary because the US banking system generally restricted banks' activities to a single state and had the result of making some areas credit-scarce and others—notably the earlier-settled eastern states—credit-rich. Firms in credit-scarce areas therefore began to raise funds by selling open-market paper (commercial paper and bankers' acceptances) in New York and elsewhere, mainly to banks.

The market developed in the 1920s, with consumer finance companies (which often made direct issues rather than using a dealer) joining the large number of industrial and commercial issuers already using the market. Although there was a period of stagnation during the 1930s, issues grew rapidly after World War Two. In the mid-1960s CP issues were encouraged by the high cost of bank financing relative to CP resulting from the incidence of the Federal Reserve's tight money policy and compulsory (non-interest-bearing) reserve requirements. Since this time, issues have continued to grow as bank holding companies, foreign companies, banks and sovereign borrowers have become issuers.

Today the market takes the following form. Issues are in minimum denominations of \$100,000, but mostly in the \$1–5 million range, and are in most cases unsecured. (Some issues, however, carry the extra guarantee of a letter of credit from a third party, most commonly a bank.) Issues are exempt from SEC registration and from prospectus requirements as long as the proceeds are used to finance current transactions and the paper's maturity is no more than 270 days (typically it will be 60 days or less). Restricted offerings (private placements) can be used to finance longer-term assets. Larger finance companies and US bank holding companies mainly place their paper direct, but most others sell through dealers, who buy the paper from them and then re-sell it to institutional customers. Settlement is same-day, and almost all issues are rated by one of the US rating agencies. (This has become more widespread since the collapse of Penn Central in 1970 with \$82 million in CP outstanding.) To secure a good rating, issuers must maintain a committed credit facility equal in amount to the value of their paper issues (or sometimes to an agreed percentage thereof). This provides back-up liquidity if paper cannot be rolled over because of adverse market conditions, but does *not* give any guarantee against adverse changes in the financial position of the borrower. The major investors in

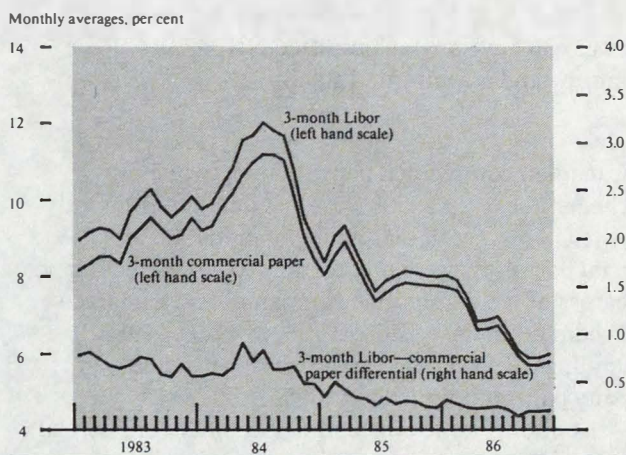
(1) For further detail, see M Stigum. *The Money Market*. Dow Jones-Irwin, 1983.

CP are corporations, money funds, and, to a lesser extent, banks. Secondary market trading is uncommon, as paper is nearly always held to maturity, although on occasion an issuer or dealer may buy back paper from an investor with an unexpected need for funds.

A number of issues are additionally supported by an irrevocable letter of credit: many foreign borrowers, and also some of the smaller US domestic borrowers, improve their credit rating in this way by backing their paper not only with a normal bank line but also with a letter of credit from a bank guaranteeing that the paper will be paid off in the eventuality of the issuer failing. This is a technique much used by Japanese borrowers. The effect of letter of credit backing is to add a second name to the commercial paper, which then trades on the basis of the second name. This increases the number of borrowers who can obtain access to the market.

The cost advantage of CP for foreign issuers is illustrated by a comparison of the average CP rate and Libor (Chart 2).

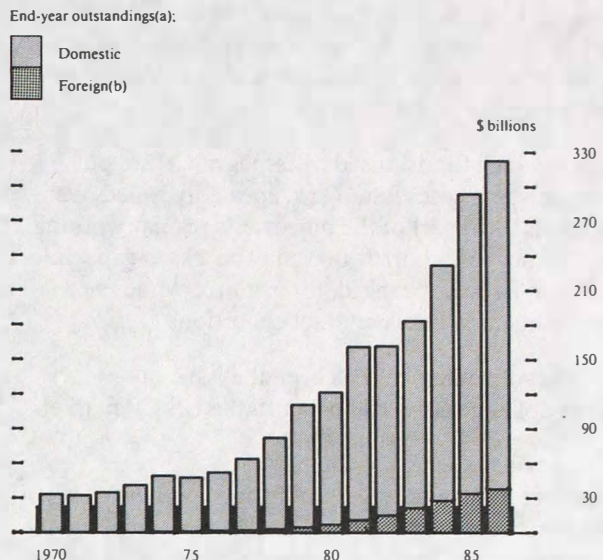
Chart 2
Comparison of 3-month commercial paper rate and Libor



Outstandings in the US CP market,⁽¹⁾ which have been growing steadily for the last twenty years, have increased particularly strongly in the last two or three years. Outstandings grew from \$111 billion in 1979 to \$162 billion in 1982, and \$323 billion in August 1986 (Chart 3). The greatest rate of increase has been in issues for foreign borrowers located outside the United States, which grew from \$5 billion in 1979 to \$15 billion in 1982, and \$38 billion in August 1986 (Chart 3). Issues by the domestic affiliates of foreign borrowers, another form of 'international' borrowing, were about half the level of foreign issues.

Foreign issuers first entered the market in 1974 with the French public sector corporation Electricité de France, but foreign issues did not begin to take off until 1978-79 when the Swedish bank Svenska Handelsbanken, and then ICI and Unilever, entered the market. For a long time

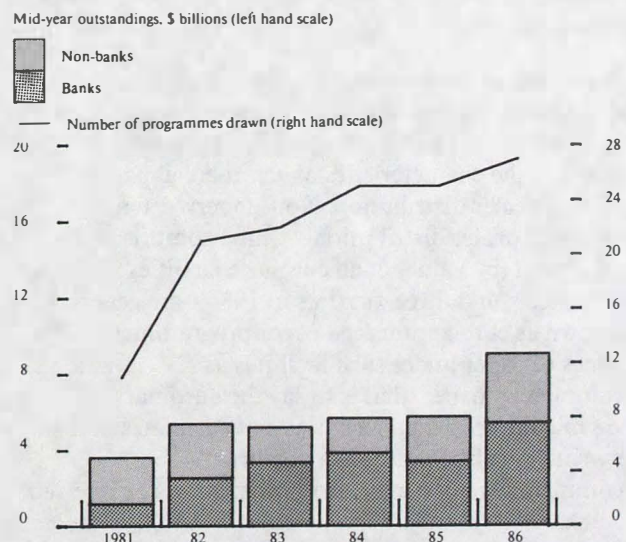
Chart 3
Issues in the US commercial paper market



Source: Federal Reserve Board.
(a) End-August figure for 1986.
(b) Borrowers located outside the United States. Subsidiaries are, for statistical purposes, included with domestic borrowers.

investors applied a premium to issues by non-domestic borrowers, but this has reduced as familiarity with foreign borrowers has increased. The French are the biggest issuers, with Electricité de France the most prominent. Other particularly active nationalities are the Australians, Canadians, Japanese and British. The majority of foreign issues are for banks, including the big four UK banks. Other active UK issuers include BP and British Telecom. In all, around thirty UK borrowers have US CP programmes. Between mid-1985 and mid-1986 UK borrowers increased their US CP outstandings substantially, from \$5.7 billion to \$9.1 billion (Chart 4). They also increased their issues of international bonds

Chart 4
Issues by UK borrowers in the US commercial paper market



Source: Moody's Investor Service.

(1) Source: Federal Reserve Board.

and FRNs; at the beginning of 1986, having made \$14.5 billion of new issues in 1985, UK borrowers had outstandings of at least \$23 billion. In 1986 they made a further \$19.6 billion of gross new issues (although many earlier issues will have matured or been repaid), and also arranged a number of euronote facilities.

The uses to which funds raised by issues of CP are put may vary. In some cases issues are repeatedly rolled over and the funds form part of the borrower's regular working capital. In other cases borrowings may be a stop-gap while a longer-term issue is arranged, for example while the borrower waits for suitable market conditions.

A very recent development has been the issue of Australian dollar commercial paper in the US CP market.

Eurocommercial paper

There have been several stages in the development of a short-term instrument in the euromarket. Although the basic instrument (the euronote) has remained the same—a promissory note for non-bank borrowers and a certificate of deposit (CD) for banks—there has been great variation in the manner of arrangements under which the paper has been issued. Until the last year or so the most common arrangement was the note issuance facility (NIF) or revolving underwriting facility (RUF),⁽¹⁾ under which a group of underwriting banks guarantees the availability of funds to the borrower by purchasing any unsold notes or by providing a standby credit. Increasingly, however, borrowers have dispensed with this structure: non-underwritten facilities have become more popular; and issues have taken on more and more of the characteristics of commercial paper. These include the separation of the issuance of notes from the standby arrangement, the availability of shorter and flexible maturities, a move towards same-day settlement of funds, the setting of rates on an absolute basis (rather than by reference to an interest-rate index such as Libor or Libid), the distribution of notes through dealers rather than tender panels, the issuance of notes in response to investor demand, and the introduction in a small number of cases of ratings.

Although some conventional note issuance facilities continue to be arranged, most new euronote facilities now have a much more flexible structure and incorporate at least some of the characteristics of commercial paper, particularly dealer distribution. Non-underwritten facilities with dealer distribution—which comprised around a third (by value) of all euronote facilities arranged in 1985 and around three quarters in 1986—are generally now known as eurocommercial paper programmes (ECP), and issues of paper under such facilities as eurocommercial paper (that is to say the euromarket version of commercial paper). Issues of euronotes under underwritten facilities, although not strictly eurocommercial paper, may also in some cases be referred to as such.

Outstandings under euronote facilities and eurocommercial paper programmes are estimated at late 1986 at around \$35 billion. The euronote and ECP markets are almost entirely centred on London, although a small number of issues have been made in other centres.

As euronote facilities and eurocommercial paper have developed, a number of features linking euro and US issues have been devised. These enable borrowers to switch between the two markets to take advantage of differences in market conditions. An early difficulty encountered in this area was the different settlement periods in the two markets (same-day in the US, 2–3 days for euroissues). To overcome this difficulty, facilities began to include 'swinglines', enabling borrowers to make 2–3 day drawings to cover the delay in issuing euronotes when switching from US CP. More recently, however, same-day settlement has become more common with eurocommercial paper issues, making this less of a problem.

Many 'global' paper programmes are now arranged. These provide for issues of US CP, euro CP and sometimes sterling or other CP under the umbrella of a single package. An example of the refinement of this technique is the Borrower's Option for Notes and Underwritten Standby (BONUS) facility, under which, typically, the borrower will have an uncommitted NIF, a US CP programme and a committed standby.

Canada

The Canadian commercial paper market, which was launched in the early 1950s, developed rather differently from the US market in that issues by industrial and financial borrowers were preceded by issues by the finance companies of US automobile companies and the large retail chain department stores.⁽²⁾ In November 1986 outstandings of such sales finance and consumer loan company paper amounted to Can \$5.7 billion (US\$4.1 billion), while outstandings of other commercial paper issued by industrial and financial companies, which has been the fastest-growing sector of the market in recent years, had reached Can \$10.0 billion (US \$7.2 billion), including Can \$3.9 billion (US \$2.8 billion) of issues by non-financial corporations.

Finance company paper and other commercial paper are generally issued for terms of 30 to 365 days, although terms as short as overnight are available. Finance company paper is commonly issued in minimum denominations of Can \$50,000, while the typical minimum denomination of other commercial paper has tended to be Can \$100,000. Paper in both cases may be issued in bearer or registered form, and may be issued at a discount or in interest-bearing form.

Finance company paper is generally placed directly and held to maturity, although it may in some cases be

(1) For the early history of the market see 'The international market for floating-rate instruments' in the March 1984 *Bulletin* (pages 337–43); for more recent developments see 'Developments in international banking and capital markets in 1985' in the March 1986 *Bulletin* (pages 58–70).

(2) For further detail, see S Sarpkaya. *The Money Market in Canada*. Butterworths, 1980.

repayable at the option of the investor. Most other paper, however, is distributed by dealers. The main investors are financial institutions and corporations. There is active arbitrage with the US market, especially by big US corporations, which often run parallel US and Canadian programmes (through their Canadian subsidiaries). Increasingly these borrowers also have a parallel euronote or eurocommercial paper programme.

Unlike US CP, paper issued by Canadian companies is normally secured by the pledge of assets (typically accounts receivable). However, many of the foreign-owned companies operating in Canada issue unsecured obligations. The automobile finance companies, which account for a large proportion of the finance company paper issued, issue with a guarantee from their US parent. There have been only a few cases of foreign borrowers directly issuing paper in Canada and using the funds to support their operations elsewhere.

Although there are no prospectus requirements, considerable disclosure is required of the issuer, and most issues are rated. Standby lines of credit, as in the United States, are common, although the top borrowers may not require a related line and other large companies may back only 50% of outstandings. Unlike some other forms of borrowing such as trade bills and bankers' acceptances, issues of CP do not have to be related to a specific transaction but can be used for general working capital needs. However, Canadian companies make more use of bankers' acceptances to raise short-term financing than commercial paper. In November 1986, outstanding bankers' acceptances amounted to Can \$25.7 billion (US \$18.6 billion) compared with outstanding commercial paper of Can \$15.7 billion (US \$11.4 billion).

France

The commercial paper market in France was launched in December 1985 as part of the government's policy of liberalising French capital markets and giving borrowers a wider choice of financial instruments. This followed lobbying by French companies eager for a cheaper and more flexible alternative to bank loans. Although based loosely on the US model, a number of specific features have been introduced by the authorities which aim to tailor the instrument to local requirements. CP may be issued only by non-bank French companies and subsidiaries of foreign companies. A rating agency, Agence d'Evaluation Financière (ADEF), has been set up as a joint venture between government agencies and institutional investors and this will in time take on increasing importance. Investors are provided with two additional sources of comfort. The first is that the law contains fairly extensive disclosure requirements, and requires the publication by issuers of regular financial statements. The second is a requirement that for issues with maturities of up to two years the issuer must have in place a liquidity line equal to at least 95% of his CP

outstandings (75% from March 1987). As in the US market, this line provides a guarantee of repayment (of at least the major part of the principal) only if a rollover is impossible because of changed market conditions, and not if the financial position of the issuer has deteriorated.

Notes are in bearer form and can be either issued by dealers or placed directly, and settlement is generally next day. The minimum denomination for issues, which are known as 'billets de trésorerie', is Ffr5 million and maturities can range from 10 days to two years (seven years from March 1987). So far, however, most issues have been in the 20-40 day range. By the end of November 1986, outstandings had reached Ffr25.8 billion (US\$4.0 billion), with well over 100 issuers, including several subsidiaries of foreign companies. The main investors have been Sicavs (investment companies), pension funds, insurance companies and commercial companies.

United Kingdom

The announcement in March 1986 of measures to allow the issue of sterling commercial paper⁽¹⁾ followed similar steps a year earlier in respect of short-term (one to five year) corporate bonds. Both involved exemptions from the Banking Act 1979, without which issuers would have laid themselves open to action for unauthorised deposit-taking. As a *quid pro quo* for the exemptions, certain requirements were imposed on issues in the interests of investor protection.

These requirements include the following. To be eligible as an issuer, a company must be listed on the London Stock Exchange and must have net assets of at least £50 million (or be the subsidiary of such a company and issue under a guarantee from the parent company). As in other centres, overseas as well as domestic companies are eligible as long as they satisfy these criteria. Maturities must be between 7 and 364 days. Paper must be in minimum denominations of £500,000 and must carry a statement that the issuer or guarantor is in compliance with The Stock Exchange listing requirements and that there have been no significant adverse changes in its circumstances since it last published information in compliance with these requirements. (The Financial Services Act 1986 removed the need for a prospectus for sales of sterling CP to 'professional' investors.)

Banks and building societies can make short-term paper issues in the form of certificates of deposit.⁽²⁾

The opening up of the market was welcomed by the financial community and by potential borrowers. By the end of November 1986 facilities totalling more than £3 billion had been arranged and issues of £690 million (US \$1.0 billion) were outstanding. Sterling commercial paper issuance has also been added to a number of existing euronote and eurocommercial paper

(1) See 'Sterling commercial paper' (notice issued by the Bank of England, 29 April 1986) reprinted in the June 1986 *Bulletin* (pages 198-9).

(2) See 'Short-term paper issues by deposit-taking institutions' (notice issued by the Bank of England, 26 November 1986) reprinted in the December 1986 *Bulletin* (pages 488-9).

programmes, which for some time have included provision for notes to be issued in other currencies whenever note issues in those currencies become possible.

The sterling CP market does not enjoy the benefit provided in the United States by substantial reserve requirements imposed on banks, which create an incentive for financing through instruments which need not be held on banks' balance sheets. Nevertheless, borrowers can raise money more cheaply through sterling CP than by borrowing from banks; and at times more cheaply than with bankers' acceptances. Experience with the market so far has been that the balance of advantage between commercial paper and other instruments shifts from day to day and from one maturity to another. Comparisons based on a single maturity and average rate differentials may not therefore give a good indication of commercial paper's competitive position.

Australia

The Australian dollar commercial paper market (or promissory note market, as it is known locally), which has been in existence for more than a decade, has in the last two or three years become one of the most fully developed domestic CP markets. The market received a fillip in 1983 when stamp duty, which had reduced CP's cost advantage, was abolished. The establishment of Austraclear, a clearing house, in 1984 and the rating of issues by a ratings agency, Australian Ratings, further encouraged the development of the market.

Australia, like the United States, Canada and the United Kingdom, has a long-established commercial bill market. Promissory notes have been popular with securities dealers, however, since they do not require endorsement and hence do not incur any contingent liability. Issues carry maturities of up to 185 days and are made by a wide variety of issuers (which number more than a hundred), including Australian statutory authorities and the Australian subsidiaries of some foreign companies. There are no restrictions on who can make issues and no prospectus requirements. Many issues are underwritten, and, as in the US market, letters of credit are used to back some lesser-known borrowers. Denominations are high, mainly Aus\$500,000 or Aus\$1 million. Large issues continue to be put to tender, with financial intermediaries usually retained to establish an underwriting syndicate and tender panel.

At mid-1986, around Aus\$14 billion (US\$9.3 billion) of facilities were in place, with outstandings estimated at around Aus\$6.5 billion (US\$4.3 billion). Australian dollar promissory notes have been increasingly used as part of a multiple option facility which also typically includes US dollar euronotes and multicurrency advances.

Netherlands

As part of the government's policy of progressive deregulation of financial markets, the issue of guilder-denominated bearer paper with a maturity of less

than two years was permitted from 1 January 1986. The market is not expected to become very large because companies already have access to short-term funds in the money market. In the course of 1986 nine programmes were announced and in October 1986 DF750 million (US\$0.3 billion) was outstanding. There are very few restrictions on issuers (which do not have to be incorporated in the country), and, in line with the authorities' aims of deregulation, no back-up line is required. The central bank, as well as monitoring issues in the market, has from October 1986 provided a clearing service, which may promote new arrangements.

Spain

The commercial paper market in Spain was opened in October 1982 with an issue for a state-owned borrower. Spanish CP, known as 'pagarés de empresa', has grown rapidly despite the extension of reserve requirements to paper guaranteed by banks in January 1984. In mid-1984 the size of the market was estimated at Ptas 200 billion (US\$1.5 billion), including substantial issues for several local subsidiaries of foreign-owned borrowers. Issues continued to increase in the first half of 1985, then declined substantially following the application of an 18% withholding tax in May. The market recovered when there was a sharp decline in the Treasury bill rate and outstandings in late 1986 reached Ptas 700 billion (US\$5.4 billion).

Spanish CP is similar in form to that issued in most other markets. It is short-term fixed-rate paper, with separate market segments for issues by companies and banks. Around ten per cent is traded on the Spanish stock exchange but most trading is between institutions. Some borrowers back their issues with a medium-term revolving credit, which gives them the guarantee of medium-term funds if short-term notes cannot be sold: this is essentially the same as an underwritten NIF or RUF.

Norway

In December 1984 the Norwegian Ministry of Finance authorised the issue of short-term negotiable paper, termed certificates. There are four categories of certificates: treasury certificates, bank certificates, finance certificates (issued by private finance companies) and loan certificates (issued by state banks and other enterprises). The maximum term is twelve months, with a minimum size of issue of NKr25 million and a minimum denomination of NKr1 million. Authority to issue and purchase certificates is restricted to Norwegian institutions and enterprises.

During 1985 there were 25 issues of loan certificates with a gross value of NKr3.5 billion (US\$0.5 billion). In the period January–October 1986 there were 75 issues with a gross value of NKr6.6 billion (US\$0.9 billion).

Sweden

A domestic commercial paper market was established in the early 1980s, and after a slow start had grown to a size

of SKr50 billion (US\$7.4 billion) by late 1986, making it the third largest domestic market (after the United States and Canada). Issues are not rated and there is no regulatory requirement for a back-up line, with many larger companies not arranging a specific committed line. Average maturities are shorter than in the US market, at around thirty days. The market is used by over a hundred Swedish companies, municipalities, and the local subsidiaries of several multinational corporations.

Banks, including the subsidiaries of foreign banks, make short-term paper issues in the form of certificates of deposit. Issues in this market, in late 1986, amounted to around SKr 7 billion (US\$1.0 billion).

Hong Kong

The Hong Kong dollar commercial paper market, after a few issues in 1982 and 1983 for Hong Kong issuers, began to develop more fully in 1984, when issues totalling HK\$2.6 billion (US\$0.3 billion) were arranged. Following

confirmation from the authorities in December 1984 that CP issues by companies did not violate the Deposit-Taking Companies Ordinance (previously the issue of CP might have been viewed as taking deposits), the market was given fresh impetus, and in 1985 nineteen new programmes were announced for an aggregate amount of HK\$8.1 billion (US\$1.0 billion), and in the first ten months of 1986 six programmes totalling HK\$3.8 billion (US\$0.5 billion). These included programmes for the Hong Kong subsidiaries of several foreign-owned borrowers. By mid-1986 estimated outstandings had reached US\$1.2 billion.

Singapore

A promissory note market in Singapore dollars developed in late 1984 as an adjunct to the euronote and eurocommercial paper markets. In 1985 five facilities were arranged with a total value of S\$0.3 billion (US\$0.1 billion) and in the first ten months of 1986 six totalling S\$0.4 billion (US\$0.2 billion).