Rating Methodology



October 2000

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ALTERNATE LIQUIDITY FOR BANKS' COMMERCIAL PAPER

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Banks which are about to issue rated commercial paper frequently approach Moody's with questions such as "How much alternate liquidity should we have to support our CP programme?" or "What information do you need from us in order to rate our CP?". The purpose of this Rating Methodology paper is to show how we answer those questions. There are three main themes:

- What are the basic principles driving Moody's overall approach to the issue of alternate liquidity?
- Does our approach to liquidity differ when the issuer is a bank rather than, say, a corporate enterprise? ("Are banks different?")
- How does Moody's assess the adequacy of the liquidity supporting banks' commercial paper?

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Basic Principles Of Moody's Analysis

THE COMMERCIAL PAPER MARKET IS BECOMING MORE RISKY

Important changes are taking place in the market for alternate liquidity. Not only has commercial paper issuance been growing rapidly but short term funding is now being used to fund a widening range of activities, including long term investment. Furthermore, the globalisation of financial markets and the increasing use of complex risk management tools have increased the systemic risk of payment disruptions. Although financiers have in recent years designed new instruments with the aim of increasing the range of alternate liquidity structures to support commercial paper programmes, it is Moody's view that the development of these instruments has not fully compensated for increased risks in the commercial paper market. As a result, the commercial paper market has become inherently more risky.

Moody's responded to this trend by sharpening its analytical approach. In June 1999, we published a Rating Methodology Study entitled *Assessing the Strength of a Liquidity Facility*; in November 1999 we published a Special Comment entitled *Alternate Liquidity: Current Topics and Trends*; and in January this year, a further Rating Methodology Study was published entitled *Moody's Approach to Assessing the Adequacy of "Liquidity Risk Insurance*". The present study, which considers only banks, is one of a series of special comments explaining how Moody's analyses alternate liquidity in specific industry sectors.

MOODY'S THINKS IN TERMS OF "LIQUIDITY RISK INSURANCE" RATHER THAN "ALTERNATE LIQUIDITY"

Moody's sees alternate liquidity facilities – and back-up lines in particular – as only one aspect of an issuer's liquidity management. Discrete facilities which provide alternate liquidity for specific CP programmes do not amount to a comprehensive response to an issuer's liquidity risk. Indeed, in the case of banks, we would sometimes take the view that back-up lines are unlikely to be of any value at all in a crisis, and so we might discount them in our assessment of a bank's liquidity insurance arsenal (see below).

Moody's thinks in terms of "liquidity risk insurance" — a concept which addresses an issuer's ability to discharge all of its short-term liabilities. An assessment of an issuer's liquidity risk insurance takes into account all near term sources of cash, all near term claims on cash, and the way in which those flows could be affected under a variety of scenarios. Back-up lines and swinglines assigned against outstanding CP are only one element of a issuer's liquidity risk insurance.

Fundamental to Moody's approach – across all industry sectors – is a belief that quantitative factors on their own are poor predictors of credit problems. When we analyse specific examples of CP issuers who have faced liquidity problems, we find that the trigger for their difficulties and the way in which those difficulties unfolded was governed more by qualitative factors than by financial ratios. Such qualitative factors included investor perceptions (whether well-informed or not); the way in which managers responded to problems as they arose; and the strength of contingency planning. (Our June 1999 study *Assessing the Strength of a Liquidity Facility* illustrates this point with case studies.)

MOODY'S METHODOLOGY IS NOT RATIO-DRIVEN

We realise that many issuers would prefer there to be a formulaic relationship between the rating assigned to a CP programme and the quantity and nature of back-up lines which would be appropriate for such a rating. Such issuers would like to tell us the size of their proposed programme and the maximum envisaged daily maturities, and then have us tell them exactly how much back-up liquidity they would need to secure a certain rating on that programme. But we are never able to respond in that formulaic way because the rating process contains qualitative as well as quantitative elements. Even parts of the analysis which are apparently ratio driven may in fact rely on qualitative factors.

We realise that issuers are often in a hurry to receive timely and unambiguous answers and we always try to be responsive to that need. It should not be thought that our refusal to respond according to a predetermined formula or matrix will prevent an issuer from proceeding along its desired timetable. We are usually able to give clear indications of how we will assess a bank's liquidity risk insurance by citing recent precedents and explaining the analysis behind them.

"Are Banks Different?"

The basic principles which Moody's uses to analyse banks' liquidity risk insurance – and within that, specific back-up facilities – are applicable across all industry sectors. But banks' funding profiles and cash flow are clearly very different from those of, say, industrial companies, so the ways in which banks may secure sound liquidity risk insurance are different too. Furthermore, banks usually occupy a quite different position within their domestic economy, and this has an important bearing on their access to liquidity.

Within the banking universe, it is important to recognise a difference between CP issued by banks and that issued by bank holding companies. In the United States, CP is issued by bank holding companies, rather than by banks as is the case in Europe. In the following paragraphs, we focus on liquidity insurance for banks, and then we point out some special considerations for bank holding companies.

COMMERCIAL PAPER COMPRISES ONLY A SMALL PORTION OF BANKS' SHORT TERM OBLIGATIONS

Commercial paper issued by banks usually comprises only a minority of their short-term obligations, whereas it dominates the short-term funding of industrial companies and finance companies. As a result, discrete back-up lines assigned against banks' commercial paper can only ever cover a minority of the bank's short term funding. We therefore believe that bank managers would be reluctant to utilise back-up facilities, because in doing so they might be signalling to the market that their bank has liquidity problems, leading to a run on other short-term obligations, which are usually several times larger than the commercial paper outstandings.

The risk that in drawing on back-up lines to cover a specific need an issuer may trigger a generalised run on its funding does not apply only to banks. It is an important consideration in Moody's analysis of any commercial paper issuer. But it assumes greater significance for bank issuers because the relative size of commercial paper and total short-term funding is so different. (For a corporate, safeguarding the commercial paper may enable it to remain solvent while other liabilities are restructured.)

BANKS HAVE ACCESS TO CENTRAL BANK FUNDING

The key difference between banks' liquidity risk insurance and that of other issuers is banks' regulatory status giving them access to central bank funding. This special status arises from the conflict between banks' inherently illiquid funding structures and important role which that funding has in the wider economy. On a stand-alone basis, banks' funding structures are inherently illiquid since their liabilities are dominated by deposits which contractually have short-term tenure. But these deposits predominantly fund long-term and largely illiquid loans. Banks' special status and regulated framework enable them to attract deposits and thereby increase the pool of savings available to fund society's needs. In many countries, deposit insurance is another tool used to stabilise a country's deposit base. This special status results in banks having a value in society as institutions with strong creditworthiness and abundant liquidity even though structurally they are short-funded. Banks' special status also puts the central bank and bank regulators in a position where they determine if an economically wounded bank survives or fails – as a result of their decision whether to provide funding or not.

SWINGLINES ARE STILL IMPORTANT FOR BANKS

Because banks differ from other issuers in the ways described above, Moody's places less value on the presence of back-up lines when assessing a bank's liquidity risk insurance. In contrast, we do attribute considerable importance to the presence of swinglines when the circumstances of the issuer warrants them, and in this respect our approach to banks differs little from that which we would take when considering swinglines employed by non-bank issuers.

It is important to be clear about the difference between back-up lines and swinglines. A swingline is a specific type of back-up facility which guards against short-term event risk, usually in the context of a need to make payments across borders and time-zones. The archetypal example is that of a non-US bank which finds itself unable to roll over paper issued in the US on a day when its home market is closed for a public holiday. With no funding ability in the US market, the bank would draw on a swingline to cover its liabilities over the holiday period. Swinglines could also be put in place to ensure a European bank's payment

ability in say, Australia, during hours when the European markets are closed. Note that in these circumstances, the issuer's ability to cover its liabilities is unconnected to its underlying credit strength or the liquidity of its balance sheet as a whole.

At the risk of over-simplification, swinglines can be seen as providing protection against event risk, whereas back-up lines provide protection against general credit risk, in the form of illiquidity. Because swinglines serve this narrow function, in using them managers are less likely to send worrying messages about their bank's overall liquidity position. As a result, managers would feel more able to draw on swing-lines in a way that they would not in the case of general back-up lines.

LIQUIDITY INSURANCE FOR BANK HOLDING COMPANIES

The liquidity profile of banking holding companies is different from that of a banks, in that holding companies tend to rely heavily on dividends from their operating subsidiaries in order to discharge their debt obligations, as opposed to relying on their own resources, as is the case with an operating bank. At a time of difficulty, regulators can block payments from the bank to the holding company. Furthermore, bank holding companies – in the US at least – do not have access to the Federal Reserve discount window.

Moody's evaluation of bank holding company liquidity is driven by both a statistical analysis of the holding company's liquidity position and on a qualitative analysis of its ability to obtain cash from outside parties. The details of this evaluation were outlined in our Rating Methodology Study, *How Moody's Evaluates US Bank Holding Company Liquidity*, February 2000.

How Does Moody's Assess The Adequacy Of Liquidity Risk Insurance For Banks' Commercial Paper?

In nearly all cases, Moody's already has a view on a bank's ability to discharge its short-term obligations, in the form of a short-term debt/deposit rating. That short-term rating refers to all of a bank's short-term obligations. The question therefore arises as to whether the issuing of new commercial paper would materially change the liability and liquidity structure of the bank. If the size and nature of the issue is such that the structure is transformed – presumably in a negative way – then a decision might be taken to lower the short-term rating of the bank and assign the same, lower, rating to the CP programme. It is, however, improbable that a bank and its advisors would launch a programme which was to have such a dramatic effect on the bank's balance sheet structure.

As already indicated, we would rarely see standard back-up lines as adding value to a bank's liquidity risk insurance. As for swinglines, we would seek to understand what types of funding difficulties a bank might encounter. The first stage is to know the bank's internal policies on the maximum amount of CP which it is willing to have falling due on any one day, and on any series of days (eg, maximum maturing CP over five consecutive working days). Then the discussion moves to how many days disruption a bank might reasonably suffer in a variety of stressed scenarios. Such scenarios would include not only that of bank holidays and cross-continental timing differences mentioned above, but also the possibility of communications breakdowns or computer failures preventing the transmission of funds. If the swinglines are denominated in a currency other than that of the CP issued, greater-than-normal coverage may be required to compensate for any loss of value due to exchange rate fluctuations.

In general, we find that our discussions about the adequacy of banks' swinglines tend to focus on facilities covering between three to seven days of maximum maturing amounts of CP. Note that we would not expect Prime-2 rated banks to show larger swinglines than Prime-1 banks. As already explained, swinglines do not cover a bank's credit risk, but rather event risk, and the extent of that event risk applies equally to all issuers. (If a computer failure prevents the transfer of money from London to New York, it will affect Prime-1 and Prime-2 issues equally.)

It is often pointed out that in the case of market disruption – such as occurred after the Russian default in September 1998 – Prime-2 issuers will be shut out of the market for longer than Prime-1 issuers. That is true, and is indeed what happened following the Russian default. But a bank's ability to cope with loss of market access is already captured by its short- and long-term debt ratings. Its ability to fund CP falling due is the same as its ability to fund all its other short-term liabilities. Domestic funding ability in a foreign market may reduce a bank's need for swinglines. For example, a US bank which has a deposit-taking subsidiary in Europe may need lesser swinglines when issuing Euro CP than a bank which has no such presence in Europe. The assumption here is that the subsidiary would be able to assist the parent in paying off maturing liabilities while the parent was unable to do so. Our analysis would focus on whether the local regulators would object to such transfers; the subsidiary's ability to raise funds – whether it is a well known participant in the local interbank market; and the size of the subsidiary in relation to the volume of maturing CP. Settlement terms would also be taken into account: in the European CP market, there is two-day settlement, where as in the US CP market settlement is on the same day.

Appendix I

Information used by Moody's when judging the adequacy of bank-up lines and swinglines

Banks preparing to launch CP programmes frequently ask Moody's what information they should provide about the programme and its back-up/swinglines to help us reach our rating conclusion. Our point of departure is to discuss with the bank why it is choosing to issue CP and how the programme will fit into its overall funding strategy. The discussion then moves on to consider how the bank would cope with an inability to roll over maturing CP *and other short-term obligations* under a variety of scenarios. Alternate liquidity, in the form of back-up lines and swinglines, would be one element in this discussion. As should be clear from the foregoing analysis, Moody's attaches considerable importance to the outcome of these qualitative discussions. Nevertheless, there is a fair amount of essential "factual" information which is basic to any rating outcome. This "factual" information would include the following:

- What is the total size of the proposed CP programme and the maximum amount which would be issued under that programme at any one time? How does this relate to the size of other short-term obligations and to the size of the balance sheet as a whole?
- What will the issuer's policy be on the maximum amount of CP which will mature on any single day and on any group of consecutive days (eg three days or five days)? What is the volume of other short-term liabilities which could also require rolling over or refinancing?
- Are swinglines committed by the banks, and paid for by the issuer? Have the banks given any formal indication of their intention to renew those lines?
- Are there any Material Adverse Change ("mac") clauses on the committed facilities?
- Is the issuer the bank itself or a bank holding company?
- Has the programme been formally approved and minuted by the bank's board of directors.

Appendix II

Structured vs. unstructured facilities

Issuers sometimes argue that the alternate liquidity facilities which they have put in place against a CP programme are so strong that the programme warrants a higher rating than the issuer's other short term liabilities – for example, a Prime-2 rated bank seeking a Prime-1 rating on its CP.

"Structured" financial instruments may indeed by rated higher than the entity which is sponsoring them – and there is no reason why this may not be the case for "structured" commercial paper. But in practice, back-up lines, however strong, do not give the degree of credit protection which is seen in structured products. The (unstructured) commercial paper is not being issued by a separate legal entity and it is not "bankruptcy remote" – that is, if the bank faces insolvency, its CP programme is automatically at risk. Funds to service the paper do not derive from an assigned source. Nor is the commercial paper dedicated for a specific use – it is part of the issuer's overall funding pool.

It is in theory possible for a Prime-2 rated bank to have its CP rated Prime-1 provided it takes the structured route. But the programme would have to be designed ("structured") from the start to achieve that objective. Tweaking the back-up lines is not sufficient.

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