1998

The Commercial Paper Market Who's Minding the Shop

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On Jan. 31, 1997, Mercury Finance Co.—a major player in the automobile lending business—surprised financial markets by defaulting on $17 million in commercial paper. By the end of February, the amount in default had ballooned to $315 million, representing 60 percent of Mercury's outstanding commercial paper and 30 percent of its outstanding debt. As the saga unfolded, some financial market observers expressed concern that Mercury's default would send shock waves throughout financial markets, perhaps on the scale of the $82 million commercial paper default by Penn Central Railroad some 27 years earlier.

Despite the corporate sector's heavy reliance on commercial paper as a funding source, Mercury's default had little impact on the market as a whole. Indeed, only companies involved in used car financing and other low-end lending activities were forced to pay higher default premiums on their commercial paper as a result of the Mercury debacle. In contrast, Penn Central's bankruptcy so spooked commercial paper investors that the Federal Reserve was forced to step in to calm market jitters. Was the Mercury Finance episode a fair test of the resilience of the commercial paper market, or does the Federal Reserve still need to guard against the potential fallout from a major commercial paper default?

Paper Points

Firms finance their assets with a mix of debt (borrowing) and equity (owners' capital). Debt can either have a long or short maturity. A 10-year bond is an example of long-term debt, while commercial paper is an example of short-term debt. More specifically, commercial paper is a short-term, unsecured debt instrument, used mostly to finance current operations. Because it is unsecured, commercial paper is a financing option reserved for only the highest quality firms. The typical issue matures in less than 45 days and is denominated in the millions of dollars. Commercial paper is sold at a discount and pays face value at maturity, with the holder receiving the capital gain in lieu of interest. Firms generally "roll over" outstanding issues; that is, they sell new paper to pay off maturing paper.

From the issuer, or borrowing firm's, perspective, commercial paper is like an IOU. The issuer writes out a promise to pay a sum—say $1,000—in a few weeks in return for an advance of, for example, $995 today. Of course, because no collateral is offered, no one will accept the IOU unless the issuer is very creditworthy. When the IOU comes due, the issuer then writes out another IOU—possibly to a different party—to raise the funds to pay back the first lender.

Financial firms issue 78 percent of all commercial paper—25 percent of which is from finance companies. The largest finance company issuers are subsidiaries of large industrial firms that facilitate purchases of parent company products—sometimes called captive finance companies. As of June 30, 1997, the top three captive finance companies—General Electric Capital Corp., Ford Motor Credit Co. and General Motors Acceptance Corp.—collectively boasted outstanding commercial paper of about $110 billion, or nearly 13 percent, of the market.

Of the nonfinancial firm issuers—which account for the remaining 22 percent of the market—industrial and service firms use commercial paper as a source of working capital, while public utilities use commercial paper to purchase raw materials (like nuclear fuels) and fund construction. In addition to using commercial paper to finance conventional public works projects, state governments have found unconventional uses, such as backing infrastructure and mass transit projects in New York and providing disaster relief funds after the 1996 Pennsylvania blizzard.1

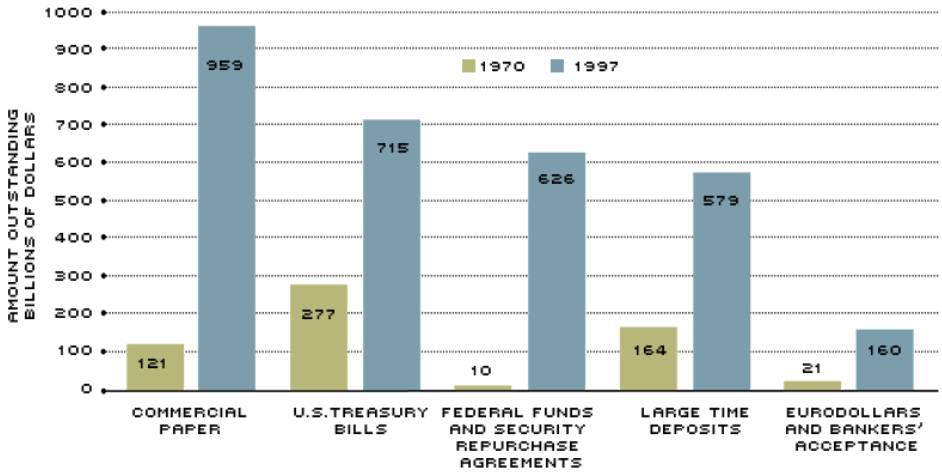
Why would anyone hold an unsecured corporate IOU like commercial paper? From the lender's, or commercial paperholder's, perspective, commercial paper is a highly liquid, low-risk asset.

Commercial paper is considered a liquid asset—one that can be converted to cash easily with little loss of value—because, as noted, the typical issue matures in less than seven weeks. Commercial paper is also a low-risk asset—one that carries little risk of default—because the typical issue has such a short maturity and is the liability of a high-quality firm. Money market mutual funds are the largest investors in commercial paper, holding about 34 percent of all outstanding paper, followed by households (13 percent), retirement and pension funds (8 percent), foreigners (8 percent), and life insurance companies (7 percent).

The commercial paper market has grown by leaps and bounds over the past two decades. Between 1980 and 1996, the total amount of outstanding commercial paper jumped from $124 billion to $775 billion, which translates into an 8.2 percent compound annual growth rate after adjusting for inflation. A look at changes in the share of commercial paper in the money market is even more revealing (see Chart 1). In 1970, Treasury bills accounted for 47 percent of the dollar volume of money market instruments, and commercial paper accounted for just 20 percent. By 1997, however, commercial paper had overtaken Treasury bills to become the largest money market instrument, totaling $959 billion, or 31.5 percent, of the market.

Chart 1

A Paper Chase: Principal U.S. Money Market Instruments



NOTE: Values are in constant 1997 dollars.

SOURCES: Flow of Funds Section, Board of Governors of the Federal Reserve System; Federal Reserve Bulletin; Economic Report of the President

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Financial innovation explains a large part of the growth of the commercial paper market. In times past, only the bluest of blue chip companies could issue such unsecured debt. In recent years, however, the information explosion in financial markets, coupled with increased competition in underwriting, has enabled more firms to issue commercial paper. For example, better information about the issuing firms has enabled the market to more accurately assess the default risk of a given issue. Liquidity enhancements, credit enhancements and securitization programs, which are all discussed in greater detail below, have further reduced the risks to commercial paper holders.

The Market for Commercial Paper

Middlemen called dealers play an important role in the commercial paper market. As late as 1980, dealers sold, or "placed," 45 percent of all paper; by 1996, however, that number had climbed to more than 70 percent. The growing importance of dealers can be attributed to financial innovation, which made commercial paper a viable financing option for smaller issuers (who tend to rely on dealers to sell their paper), as well as competition in underwriting, which reduced the transactions costs of selling issues.2

Dealers purchase commercial paper from issuers and immediately resell it to investors. Such underwriting typically earns a spread of 5 to 10 basis points. Three investment banking firms—Goldman Sachs, Merrill Lynch and Lehman Brothers—deal more than two-thirds of all commercial paper. Among bank commercial paper dealers, J.P. Morgan, BankAmerica, Chase Manhattan, Citicorp, First Chicago and Bankers Trust are the most prominent. That said, the amount of commercial paper placed by all six of them combined still lags behind the amount placed by any one of the top three investment bank dealers.

One or more of the rating agencies—Moody's, Standard & Poor's (S&P), Duff and Phelps, or Fitch-rate most of the outstanding commercial paper today. Ratings range from highest quality to paper in default. Almost all commercial paper issues carry either a higher prime rating (S&P: A1+ or A1; Moody's: P1) or a lower prime rating (S&P: A2 or A3; Moody's: P2 or P3). For example, 90.4 percent of all the issues rated by Moody's as of June 30, 1995, held the highest rating (P1), and another 9 percent held the second highest rating (P2).3

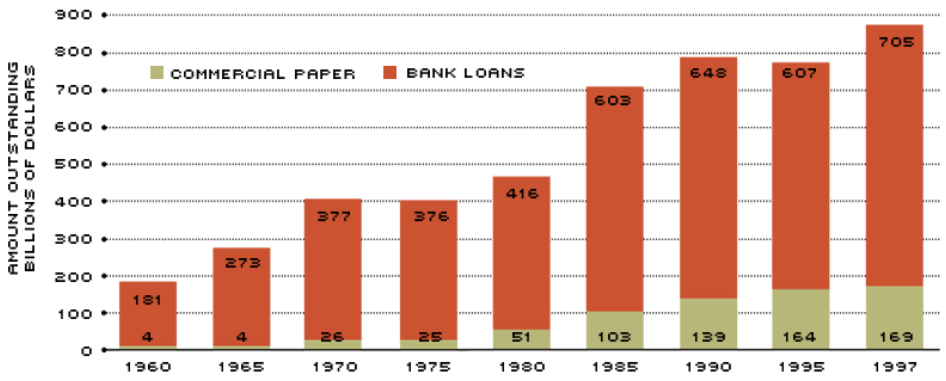
Just like the market for any other security, supply and demand determine commercial paper yields. The yield of a specific issue depends on the maturity length, the amount financed, the level of other money market rates and the credit rating of the issuer. Because of default risk, however, commercial paper yields are higher than yields on Treasury bills. Since 1991, the average commercial paper/T-bill spread for three-month instruments has been slightly under 40 basis points. On Aug. 29, 1997, for example, the 13-week Treasury bill rate offered, on average, a yield of 5.13 percent, while 90-day commercial paper offered an average yield of 5.55 percent.

At Banks' Expense?

Banks have lost a large part of their traditional lending business to the commercial paper market. Large, creditworthy corporate borrowers have increasingly turned to commercial paper because the interest costs are lower than those on bank loans (see Chart 2). At the same time, finance companies have made great strides in certain segments of the consumer loan market, such as automobile lending, by funding loans with commercial paper and passing some of the savings on to customers. Over the last 10 years, commercial and industrial loans have fallen from 32.4 percent of the U.S. bank loan portfolio to 26.6 percent, and—despite explosive growth in credit card lending—consumer loans have remained relatively unchanged at 19 percent.4

Chart 2

More Nonfinancial Firms Fund with Paper:
Commercial Paper vs. Bank Loans, 1960-97



NOTE: Values are in constant 1997 dollars.

SOURCES: Flow of Funds Section, Board of Governors of the Federal Reserve System; Federal Reserve Bulletin; Economic Report of the President

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Ironically, although banks have lost business to the commercial paper market, the market could not operate as it does without them since banks provide supporting liquidity and credit enhancements.5 In addition, banks have been important behind-the-scenes players in the rise of asset-backed commercial paper programs.

As noted earlier, most maturing commercial paper is rolled over; that is, investors are paid off with proceeds from a new issue, just as some consumers pay off one credit card with an advance from another. Rollovers carry the danger that an unexpected circumstance might interfere with attempts to replace outstanding paper with new paper—just as consumers "rolling over" credit card debt would be in trouble if a card issuer refused to come through with a promised cash advance.

Commercial paper issuers reduce "rollover risk" by securing backup lines of credit from banks. These backup lines, which are also called liquidity enhancements, give paper-issuing firms access to bank credit in exchange for a fee. Usually, commercial paper issuers maintain 100 percent backing, though some large issues have less than full backing. Backup lines usually contain a "material adverse change" clause, which allows cancellation of the line if the financial condition of the issuing firm deteriorates. As a precondition for rating a commercial paper program, credit rating agencies usually require a bank line of credit; hence, almost all issuers have a line in place.

The actual credit rating awarded ultimately depends, however, on the creditworthiness of the issuing firm or, in some cases, on the creditworthiness of a third party willing to act as a guarantor of the issue. In third-party guarantees, a firm with a weak credit rating "leases" the credit rating of a stronger firm by purchasing a credit enhancement. Such credit enhancements are irrevocable and can take a number of forms: standby letters of credit purchased from commercial banks; parent company guarantees of their subsidiaries' commercial paper; and insurance company indemnity bonds purchased by commercial paper issuers. Standby letters of credit are currently the most popular form of credit enhancement, with about 5 percent of all commercial paper outstanding backed by them.6 Standby letters back only a small percentage of current commercial paper issues because the overwhelming majority of issuers are extremely creditworthy.

Securitization—the conversion of assets into marketable securities—has spread to the commercial paper market.7 In April 1983, Standard & Poor's rated the first commercial paper issue backed by a package of receivables. By the second quarter of 1997, approximately $160 billion, or 18 percent, of all outstanding commercial paper was asset-backed, with Moody's predicting outstandings to reach $225 billion by year end. The most frequent users of asset-backed commercial paper are Fortune 1000 corporations.

Banks sponsor most asset-backed commercial paper programs by forgoing the traditional creditor-lender role and instead establishing separate business entities called special purpose vehicles. These special purpose vehicles pool assets and issue commercial paper that is backed by the cash flows from underlying assets. Assets usually consist of various types of receivables, such as credit card, auto and equipment lease, health care and even small business loan. More recently, movie studios have packaged film receivables for sale as asset-backed commercial paper. News Corp.'s 20th Century Fox helped finance both "Independence Day" and "Romeo & Juliet" this way. Since most of the underlying assets are short-lived, special purpose vehicles are structured as ongoing entities that continue to buy assets and roll over maturing commercial paper.

In bank-sponsored programs, the sponsoring bank evaluates receivables on behalf of the special purpose vehicle and receives a referral fee for the analysis. The sponsoring bank also arranges for liquidity and credit enhancements. Banks sponsor asset-backed commercial paper programs both to generate fee income and to offer customers access to the commercial paper market.

Stemming Systemic Risk

Systemic risk is the risk that a shock to a major economic player—such as a large bank—or a major sector of the economy—such as the commercial paper market—could shake the foundations of the financial system, perhaps forcing the Federal Reserve to intervene as "lender of last resort." Such an intervention occurred after Penn Central's paper default in June 1970. The Penn Central default caught the market by surprise, largely because commercial paper ratings were in their infancy at the time. Investors, concerned that other companies might also default, became skittish about holding any commercial paper. As a result, between June 24 and July 15 of 1970, outstanding nonbank paper dropped almost 10 percent.8

The Federal Reserve took four steps to address the Penn Central crisis. First, it announced that it would extend funds, in the form of discount loans, to member banks that were willing to lend to customers with maturing commercial paper. Second, it suspended Regulation Q ceilings on large-denomination certificates of deposit, thereby enabling banks to bid for funds to make commercial paper related loans.9 Third, it stepped up its open market purchases of securities, which is the standard monetary policy tool to increase the amount of funds available to the banking system for lending. Finally, then Fed Chairman Arthur Burns announced that the Federal Reserve would directly or indirectly lend to firms that were unable to retire commercial paper. The first three steps thwarted the crisis, making the fourth step unnecessary.

A meltdown on the scale of Penn Central is not as likely today because the commercial paper market is far more sophisticated. Not only do market participants know the quality of paper issuers from lengthy personal experience, but most commercial paper issues also now carry a rating. Moreover, if a major default were to occur, the market would most likely be able to distinguish between good and bad commercial paper issues. Finally, even if a surprise default—like the Mercury Financial one—spooked investors about segments of the commercial paper market, firms in sound financial condition would be able to exploit bank lines of credit to retire issues that couldn't be rolled over.

The Mercury default illustrates the maturity of the current commercial paper market, compared with the 1970 market. As noted, Mercury Finance Co., which was a major force in the sub-prime auto lending market, defaulted on most of its outstanding commercial paper after its fraudulent accounting practices were disclosed.10 Although Mercury's commercial paper was backed by $500 million in lines of credit, the fraud allegations led participating banks to invoke the "material adverse change" clause and cancel the lines, which prompted further defaults. The company eluded bankruptcy only by obtaining a loan—secured by all of its assets—from Bank of America. Bank of America later renewed and extended the loan through January 1998.

The commercial paper market collectively yawned at the Mercury default; yields in a narrow segment

of the market were the only ones that showed pronounced movement. Dealer-placed, third-tier yields on seven-day commercial paper increased 13 basis points on Jan. 29, in apparent anticipation of the Mercury default announcement. Within three days, however, yields on this short-maturity, lowest-quality commercial paper returned to their predefault levels. Yields on paper with higher ratings and longer maturities were consistently unaffected by the default. As a result, the spread between the top tier and lowest tier paper widened by 8 basis points on Jan. 29, but returned to within 3 basis points of the predefault spread in three days.

The Mercury experience, though comforting, does not demonstrate that the commercial paper market is capable of withstanding a Penn Central-type shock, for a couple of reasons. For one, the economic climates in which the two defaults took place were very different. Mercury Finance defaulted during a robust economic expansion; Penn Central went bankrupt just as the economy was entering a recession. A Mercury-style default in a weak economy might very well generate more serious financial market reverberations.

And perhaps more important, the scale of the two defaults was vastly different. The Penn Central default amounted to .25 percent of a $33 billion commercial paper market. The Mercury default, though comparable to Penn Central in inflation-adjusted dollars, represented just .04 percent of a $779 billion market. Put another way, because of the rapid growth of outstanding commercial paper, the Mercury default was only about one-sixth as large as Penn Central's when viewed relative to the size of the market. It's not clear how the market would have reacted to a comparable .25 percent (nearly $2 billion) default of a $779 billion market.

A Test for the Fed?

Since the early 1970s, the commercial paper market has matured considerably. Commercial paper is now one of the more, if not the most, important instruments in the U.S. money market, thanks in large part to rating systems and backup lines of credit. As a result, the market is well-equipped to deal with small- to moderate-sized defaults.

Still, because no Penn Central-sized crisis has occurred in the past 27 years, the market remains essentially untested. Although the insurance that banks provide against "rollover risk" reduces the probability that a severe liquidity crunch could occur, the insurance also, however, transfers the liquidity risk from commercial paper issuers to the banking system. This guarantees that any potential liquidity crisis would be much more severe. It's this risk of a systemic shockwave that makes it necessary for the Fed to keep an eye on the commercial paper market as it heads toward the $1 trillion mark.

Thomas A. Pollmann provided research assistance.

Endnotes

1. See Braverman (1997) for additional discussion. [back to text]
2. See Hahn (1993) for further discussion on the role of dealers in the commercial paper market. [back to text]
3. See Carty and Lieberman (1995). [back to text]
4. Of course, this portfolio shift is not due solely to the rise of the commercial paper market. Over the past decade, banks have become increasingly interested in holding mortgage loans for a number of reasons, including the decline of the thrift industry. [back to text]
5. See Vaughan (1996). [back to text]
6. The difference between a standby letter of credit and a bank line of credit is that the standby letter protects the commercial paper holder against default by the issuer, whereas the line of credit protects the issuing firm against market-wide conditions that would prevent a rollover. For more details on standby letters of credit, see Koppenhaver (1992). [back to text]
7. See Post (1992) and Kavanagh and others (1992). [back to text]
8. See Calomiris (1994) for further detail on the Penn Central default and the Federal Reserve's response to it. [back to text]
9. Regulation Q imposed interest rate ceilings on certain types of bank deposits. [back to text]
10. "Sub-prime" generally refers to loans made to borrowers with very poor credit histories. [back to text]

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