



BOARD OF GOVERNORS  
OF THE  
**FEDERAL RESERVE SYSTEM**  
WASHINGTON, D. C. 20551

DIVISION OF RESEARCH AND STATISTICS

## **A Change in the Source of Commercial Paper Data Published by the Federal Reserve System**

On September 2, 1997, the Federal Reserve Board will begin calculating its statistics on commercial paper (CP) from data transmitted electronically to the Federal Reserve Board from The Depository Trust Company (DTC) of New York City. The preceding Friday, August 29, 1997, will mark the as-of date for the last releases of data on CP market activity collected on forms FR 2957a, b, and d at the Federal Reserve Bank of New York through mail and telephone surveys of market participants.

The first release of CP data based on the DTC transmission will be interest rate data for September 2, 1997, released through the Federal Reserve Board's World Wide Web site on September 3, 1997, and published subsequently in the Board's H.15 statistical release of September 8, 1997. For as-of dates after August 29, the other type of CP data released by the Federal Reserve, the value of paper outstanding, will be released only on the Board's World Wide Web site and will no longer be collected or released by the Federal Reserve Bank of New York. The Board's Web address is <http://www.bog.frb.fed.us/>

The change in source will produce data on the outstandings of various CP classifications that are more reliably accurate than the current data, but use of the DTC data will not affect the continuity of the published information on CP outstanding. The change in source will, however, generate interest rate information sufficiently different from the current data that their release will represent a break in the current interest rate series rather than a continuation of them.

The Federal Reserve uses data on CP outstanding to track sources and uses of external corporate funding, measure the aggregate flow of funds, and determine the composition of short-term financing in credit markets. With information on CP interest rates, the Federal Reserve monitors short-term financial markets and gauges the current cost of funds to businesses. Relationships between CP interest rates and those on Treasury bills shed light on

investor perceptions about the risk in short-term business lending, and they may give an early indication of concerns among market participants.

## **Background**

The Depository Trust Company is a national clearinghouse for the settlement of securities trades and a custodian for settled securities. DTC performs these functions for nearly all domestic CP market activity. Because DTC generates the data through the normal course of business, they are definitively accurate and eliminate the need to impose a reporting burden on other market participants. The electronic receipt of data each day at the Federal Reserve Board will save the Federal Reserve System \$78,700 per year in expenses devoted to the FR 2957 surveys and will eliminate the 1,640 hours per year expended by market participants in responding to the surveys.

The use of DTC data will improve the accuracy of the CP interest rate data as well as improve the reliability of the information on outstandings. The current method of collecting interest rate data, telephone surveying, requires respondents to exercise some judgment when giving answers. Indeed, many market participants believe that this subjectivity has allowed the interest rate series collected through the FR 2957d to significantly overstate the rates at which actual trades occur. Such inaccuracy would greatly reduce the value of the data, both to the Federal Reserve and to market participants.

The switch to DTC's data will improve the timeliness as well as the reliability of the published outstandings data. The outstandings data will become available within one or two days instead of the one to three weeks the Federal Reserve requires to process the weekly and month-end survey data received at the Federal Reserve Bank of New York. Under the new system, in contrast, data will be downloaded at the Federal Reserve Board directly from DTC as early as 6:30 p.m. on a given as-of date, and the entire process of obtaining and processing the data for both interest rates and outstandings will require only about twenty minutes.

Regarding the reliability of classifications of outstandings, each survey respondent classifies its own programs, and there have been inconsistencies and errors in these classifications. For example, sizable revisions to the data became necessary in early 1994, when some respondents had categorized domestic CP programs as "foreign," and in 1996, when misclassifications led to a major restatement of asset-backed CP outstandings. With the

DTC data, the Federal Reserve will maintain one master list of program classifications, thereby greatly reducing the risk of misclassification.

### **The Collection and Publication of Information**

The Federal Reserve Bank of New York collects the weekly data on outstandings from 16 CP dealers and 43 firms that sell CP directly to investors on forms FR 2957a and b. The New York Bank also collects, seasonally adjusts, and releases month-end data on CP outstanding from the same respondents, and the information is subsequently published each month in the *Federal Reserve Bulletin*. The New York Bank collects offering interest rates daily by telephone on form FR 2957d from five CP dealers and seven direct issuers of CP. The averages of these responses are the composite rate indexes the New York Bank releases daily without lag, and that the Federal Reserve Board publishes in its weekly H.15 and monthly G.13 statistical releases. Some of the composite rate indexes are also published in the *Federal Reserve Bulletin*.

By agreement between the Board and DTC, the Board will release only aggregated data on CP interest rates and outstandings. The Board has categorized each CP program that DTC settles according to the categories denoted on the FR 2957a so that outstandings data released under the new system will be consistent with the current published series on CP outstanding. The share of the Federal Reserve's reported CP outstanding that has been on deposit at DTC has been growing consistently and stood at more than 99 percent in March 1997. Thus, DTC's data on outstandings are a near-perfect substitute for the FR 2957 sample.

The Federal Reserve will continue to release interest rates for both financial and nonfinancial CP at various maturities, but continuity in the published series is unlikely. The specifications for nonfinancial series are essentially unchanged, but the widely held view that the current series overstates actual market rates suggests that the level of the interest rate series derived from DTC's data will be somewhat lower than if the series were continued unchanged.

The published series on financial CP interest rates will also change substantially, largely as a result of a new, more precise specification. These changes, described below, should make the reported index a more useful measure of interest rates for a specific segment of the CP market.

The data on CP outstanding will be available to the public more quickly than before, but interest rate data--available now on a same-day basis--will be available with a one-day lag under the new system. The lag arises because DTC's data are transmitted to the Board after the conclusion of the settlement process at the end of the business day.

The interest rate series will continue to appear in the publications now carrying them, but the titles and footnotes associated with the series on the H.15 and G.13 releases will change to reflect the substantive changes to the nature of the series. The releases will report interest rates for one-, two-, and three-month maturities, instead of rates for the one-, three-, and six-month maturities currently reported. Interest rate data will also be available through the Federal Reserve Board's World Wide Web site: <http://www.bog.frb.fed.us/>

In addition to the rates collected by the New York Reserve Bank through the FR 2957d, the Board has collected weekly (Wednesday) offer-side rates for thirty-day CP with A2/P2 ratings from a sampling of CP dealers and released them in the form of a spread over higher-rated CP. Under the new system, the Board will also prepare an A2/P2 nonfinancial interest rate, at the thirty-day maturity, and release it only through the Board's Web site.

### **Method for Calculating the Interest Rate Series with DTC's Data**

The Federal Reserve Board will use DTC's data to estimate a relation between interest rates on certain securities and their maturities and will weight CP traded according to the face value of the paper so that larger trades will have a greater effect on the resulting index.<sup>1</sup> With the relation between interest rates and maturities established, the reported interest rates represent the estimated interest rates for the specified maturities. Thus, like the constant-maturity yields computed by the Department of the Treasury, this method allows the interpolation of interest rates for given maturities even when no paper was sold at those maturities.

### **Criteria for the Interest Rate Series**

The specifications of the FR 2957d call for quoted interest rates on a discount basis for CP placed for industrial firms whose paper is rated A1 or P1 and whose bond rating is Aa or the

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1. For a discussion of econometric techniques for fitting the term structure of interest rates, including bibliographic information, see, for example, Mark Fisher, Douglas Nychka, and David Zervos, "Fitting the Term Structure of Interest Rates with Smoothing Splines," Finance and Economics Discussion Series 95-1 (Board of Governors of the Federal Reserve System, January 1995).

equivalent; the five reporting CP dealers give this information as of 10:00 a.m. on days when CP trades are conducted. For financial CP, the FR 2957d surveys seven direct issuers with disparate long-term credit ratings. Under the new system, the Federal Reserve Board will prepare analogous offer-side indexes with DTC's data according to the specifications listed in the table below (the table also specifies criteria for the A2/P2 interest rate described above):

**Criteria for CP Interest Rate Indexes**

Item	AA Nonfinancial	AA Financial	A2/P2 Nonfinancial <sup>1</sup>
Short-term credit rating	Programs with at least one "1" or "1+" but no ratings other than "1"		Programs with at least one "2" but no ratings other than "2"
Long-term credit rating	Programs with at least one "AA" rating, including split-rated issuers		Programs with at least one "A" or "BBB"/"Baa" rating, including split-rated issuers but none with any ratings outside the "A"- "BBB"/"Baa" range
Credit rating agencies considered	Duff & Phelps Credit Rating Co., Fitch Investors Service, Moody's Investors Service, and Standard and Poor's Corp.		
Credit rating reviews	Programs that would be included in an index calculation are excluded when the issuer's credit rating(s) is (are) under review and a one-notch upgrade or downgrade would negate either credit rating criterion		
SEC registration types	Both traditional programs (3(a)3) and private placements (4(2)) are included		
Placement	Both dealer-placed and directly placed programs are included		
Industries included (primary SIC codes)	100-5999, 7000-9999	6000-6999, excluding 6189 (asset-backed CP) and 6200-6299 (security broker/dealers)	100-5999,7000-9999
Excluded trades	Foreign and credit-enhanced programs; secondary, repurchase agreement/financing, and interest-at-maturity trades		
Weights	Trades are weighted by their face values		

1. Not currently collected through FR 2957d

Data to assess CP trades relative to these criteria are updated daily from numerous publicly available sources. SIC code classifications are taken from the *SEC Directory of Companies Required to File Annual Reports with the Securities and Exchange Commission*. When an issuer's primary SIC code is not reported in the SEC directory, the primary SIC code reported in the issuer's financial reports is used; otherwise, SIC codes are determined

upon consultation with the Office of Management and Budget's *Standard Industrial Classification Manual* or its *Supplement*.

Interest rates calculated through the process described above are a statistical aggregation of numerous data reflecting many trades for different issuers, maturities, dealers, etc. Accordingly, while the reported interest rates purport to reflect activity in certain segments of the market, they may not equal interest rates for any actual trades. As with many other statistical processes, this one is designed to minimize differences between interest rates at which actual trades occurred and the estimated interest rates. Indeed, the process is precise relative to the trades included in each calculation. For example, regarding thirty-day nonfinancial CP sold by AA issuers, the average absolute difference between the estimated interest rates and rates for actual trades, weighted by the face values of relevant trades, was less than 1 basis point between February 1996 and April 1997. Moreover, the estimated interest rates closely approximate market participants' views of CP market pricing: Between February 1996 and February 1997, the average difference between the estimated interest rate and the quoted AA interest rate of a major dealer was less than 1/3 basis point and statistically was not significantly different from zero; in absolute value, the average difference was slightly less than 2 basis points.