

The Depository Trust & Clearing Corporation

DTCC GCF REPO INDEX

Tracks Short-Term Interest Rates by Measuring Completed Repo Transactions

The Depository Trust & Clearing Corporation (DTCC) began publishing the DTCC GCF Repo Index® in November 2010 to help bring greater transparency to the U.S. financing markets by creating a benchmark that tracks general collateral finance repurchase agreements (GCF Repos®). The index was developed in response to concerns of the Treasury Markets Practice Group, sponsored by the Federal Reserve Bank of New York, regarding the need for enhanced transparency in the Treasury and mortgage-backed securities markets.

What is the DTCC GCF Repo Index?

The DTCC GCF Repo Index is the only index that tracks the average daily interest rate paid for the GCF Repo contracts for U.S. Treasury and mortgage-backed securities issued by Fannie Mae and Freddie Mac. These are instruments that clear at the Government Securities Division (GSD) of the Fixed Income Clearing Corporation (FICC). The index's rates are par-weighted averages of daily activity in the GCF Repo market and reflect actual daily funding costs experienced by banks and investors, per underlying asset class.

What is the composition of the DTCC GCF Repo Index?

The DTCC GCF Repo Index is comprised of the weighted average of the interest rates paid each day on overnight transactions involving GCF Repos, which are based on two basic types of U.S. government securities and are represented by the following "generic" CUSIP numbers:

- U.S. Treasury < 30 year maturity (371487AE9)
- Fannie Mae & Freddie Mac Fixed Rate MBS (371487AL3)

In order to qualify for inclusion in the DTCC GCF Repo Index, the transactions in each of the two basic CUSIP numbers must be completed on a daily basis. The volume is reflective of the repo and reverse transactions that are dealer executed and does not include the inter-dealer broker portion of the transactions.

Securities excluded from the DTCC GCF Repo Index include term trades (transactions where settlement date equals trade date plus two business days or greater) and forward start repos.

The CUSIPs which are specifically excluded from the DTCC GCF Repo Index are as follows:

- U.S. Treasury <10 year maturity (371487AD1)
- Strips (371487AF6)
- Non Mortgage-Backed U.S. Agency Securities (37148AH2)
- Fannie Mae and Freddie Mac Adjustable Rate MBS (371487AM1)
- GNMA (371487AQ2)
- GNMA Adjustable Rate MBS (371487AR0)

How is the DTCC GCF Repo Index different from other benchmarks measuring short-term interest rates?

The DTCC GCF Repo Index is the only index to track GCF Repo transactions. It differs from most existing benchmarks in that it is not based on subjective rate estimates. Instead, it reflects actual, fully collateralized and centrally cleared repo transactions. This key difference ensures that the index cannot be manipulated, which provides the market with greater transparency and better risk mitigation.

What is a repurchase ("repo") agreement?

A repo is generally a form of a short-term secured loan that involves the sale of a security together with an agreement that the seller will subsequently repurchase the same security, typically on the same day.

What is the GCF Repo service?

Through GSD, FICC developed the GCF Repo service so that dealers could trade GCF Repos, based on rate, term and underlying product throughout the day without requiring intra-day, trade-for-trade settlement on a delivery- versus-payment basis.

What level of trading volume does the DTCC GCF Repo Index reflect?

Average daily trading in GCF Repos in 2016 was just under \$229 billion.

Is the DTCC GCF Repo Index made public?

The DTCC GCF Repo Index is posted on DTCC's public website (<http://dtcc.com/products/fi/gcfindex/>) and to Bloomberg (GCFR page) on a daily basis at approximately 3:30 p.m. EST. Additionally, the DTCC GCF Repo Index is posted on the Securities Industry and Financial Markets Association's (SIFMA) website (www.sifma.org) on a monthly basis.

What data is displayed publicly on the DTCC website?

The DTCC GCF Repo Index includes the following information for each of the two CUSIPs:

- Weighted average rate of overnight GCF Repo transactions submitted each day for clearing to FICC's GSD;
- 52-week high and low weighted average rates;
- Previous month's weighted average rate;
- Previous week's weighted average rate; and
- Total par value, that is, the total nominal dollar value in \$U.S. billions.

For example, the Treasury CUSIP in the month of June, 2016, had a weighted average range that went from a low of 0.419 to a high of 0.875, while dollar volumes ranged from U.S. \$72.7 billion to U.S. over \$118.9 billion daily.

Can the data on the DTCC GCF Repo Index be downloaded from the DTCC website?

Yes. The data in the graphs, which capture and display data from the most recent date to one year ago, can be downloaded in a spreadsheet format. The DTCC website provides graphs which show the activity over the past 12 months. It also allows the user to view each of the CUSIPs separately or against one or both of the other CUSIPs. Users also have the ability to view daily activity within each CUSIP.

What is the data source?

The data is provided by FICC, which serves as the clearing house for trading in U.S. government securities.

How accurate is the data?

Prior to the posting of the DTCC GCF Repo Index, each CUSIP undergoes a validation check where the current weighted average rate is compared to the prior day's rate. In the event that the current rate fails the validation check of a day over day change, GSD operations will review the underlying transactions for inadvertent rates. If all rates are deemed satisfactory, the DTCC GCF Repo Index will be posted.

How is the DTCC GCF Repo Index calculated?

For each of the CUSIPs, a weighted average rate is calculated on a daily basis using the following formula:

Par weighted rate = SUM (for each overnight trade: Dollar amount times GC rate/SUM) (for each overnight trade: Dollar amount)

Example:

	Trade Amount	Rate	Sum
	\$3,000,000	.03	90,000
	\$2,000,000	.05	100,000
	\$2,000,000	.04	80,000
Sum:	\$7,000,000		270,000

Formula: $270,000 / \$7,000,000 = .0386$ weighted average rate

For more information on the DTCC GCF Repo Index, please contact:

Sean Delap, 212-855-7627 or sdelap@dtcc.com

Brian Disken, 212-855-7622 or bdisken@dtcc.com

The DTCC GCF Repo Index® is an offering of DTCC Solutions LLC.

Disclosure: This description is for informational purposes only. This Service is governed by applicable Rules, Procedures, and Services Guide for each DTCC subsidiary, which contain the full terms, conditions, and limitations applicable to this Service.

We may provide you with additional information about our products and services from time to time. If at any time you wish to be removed from our distribution list, please send an email to PrivacyOffice@dtcc.com.

DTCC