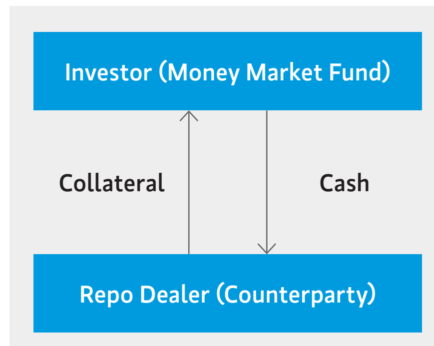
Morgan Stanley

INVESTMENT MANAGEMENT

Repurchase Agreements

LIQUIDITY | GLOBAL LIQUIDITY TEAM | 2017

A repurchase agreement (also known as a repo) is a sale of securities coupled with an agreement to repurchase the securities at a specified price on a later date. It is similar to a secured loan—the cash lender loans cash to a borrower and receives the borrower's securities as collateral.



Widely used by Money Market Funds (MMFs) and other large Institutional investors around the world, repos comprise a multi-trillion dollar market in both the U.S. and Europe. Popular due to the secure, collateralized nature of the transaction, coupled with flexibility of liquidity and collateral, repos provide an efficient solution, pairing conservative short-term lenders with borrowers in need of short-term financing.

The difference between the amount of cash loaned and the value of the collateral posted is called the "haircut" or the "margin." Each transaction is secured with collateral that is worth more than the notional amount, acting as a buffer for the lender against short-term variations in the collateral's value.

One common type of repo is the tri-party agreement. Within this transaction, the tri-party agent acts as the mediator between the repo dealer and the investor. The investor has funds that he is willing to lend and the repo dealer has securities that he is looking to finance and post as collateral for the loan. To the investor, tri-party repos offer liquidity maximization, principal protection, and a competitive market return. To the repo dealer, the transactions are a major source of short-term funding. The tri-party agent provides operational services, valuation of collateral, and optimization tools to allocate collateral efficiently.[1] The mechanics of tri-party repo are explained later in this document.

Tenor

Repos can have various maturity lengths; however, they are typically used for short-term funding.

	OVERNIGHT TRADE	TERM TRADE	OPEN-ENDED TRADE
Key Details	• Exists for one day • Negotiated early in the morning for same-day settlement • Trade unwinds the following day • Investors earn one day's interest	• Executed for a fixed period with the investment amount and end date agreed upon at trade initiation • Can be priced on either a fixed rate or floating rate basis	• No predetermined date of maturity

[1] Source: Federal Reserve Bank of New York. "Tri-Party Repo Infrastructure Reform," July 18, 2012.

Pricing

- Based on the tenor, the collateral, and the counterparty's creditworthiness
- Either fixed or floating, with floating rate trades tending to trade at a spread to Federal Funds open, especially for transactions with non-traditional collateral

Collateral

Generally, securities used to collateralize repurchase agreements are grouped into two classifications, traditional and nontraditional. Haircuts are added to the collateral amounts depending on the type of securities and their associated risks.

Non-traditional repo has been in existence for many years and is widely used in the money market space. While structurally very similar to traditional repo, non-traditional repo provides some unique advantages to both the lenders and the borrowers in the transaction. Non-traditional repo gives borrowers flexibility to finance a wider range of securities, while giving lenders attractive returns in a liquid, secured, over-collateralized investment.

	TRADITIONAL	NON-TRADITIONAL
Key Details	• Consists of all liquid U.S. Government Securities • No maturity limitation on the collateral	• Collateral other than U.S. Government Securities • No maturity limitation on the collateral
Eligible Collateral Examples	• U.S. Treasuries • U.S. Agency Securities • U.S. Agency MBS	• Commercial Paper • Corporate Bonds • Convertible Bonds • Municipal Bonds • Structured Products • Money Market Securities • Equities
Collateral Look-through Permitted?[2]	Yes	No
Look-through to Counterparty?[2]	No	Yes

Due to the wider range of eligible collateral, non-traditional repo is viewed slightly differently from both a credit and Rule 2a-7 perspective. Traditional repo is typically viewed as exposure to the collateral, rather than the counterparty. Non-traditional repo is treated slightly more conservatively in the sense that both the counterparty and the collateral are analyzed jointly. When investing in non-traditional repo, it is a conservative practice to engage only in transactions with counterparties with which one is comfortable investing on an unsecured basis, and this is a practice followed by Morgan Stanley. One of the key advantages of non-traditional repo is that it allows investors to lend to counterparties on a secured basis and typically realize a yield greater than that of an unsecured transaction. In this sense, non-traditional repo certainly benefits investors from both a safety and return perspective, while maintaining the short-term investment tenants of capital preservation and liquidity.

Safety and Security

- Regardless of the type of repo, each transaction is secured with collateral that is worth more than the notional amount of the transaction. Overcollateralization provides security to the investor from both intra-day collateral price fluctuations and the possibility of a counterparty defaulting.
- On a daily basis, the custodian marks-to-market the collateral ensuring that the investment is always fully collateralized. Should a collateral deficit exist, the repo dealer must deliver additional securities to his collateral account held at the custodian.
- Non-traditional collateral haircuts are generally higher than traditional collateral haircuts.

Examples of typical haircuts are on the below:

	CASH INVESTOR MARGIN LEVELS		
ASSET GROUP	**10TH PERCENTILE**	**MEDIAN**	**90TH PERCENTILE**
ABS Investment Grade	2.0%	5.0%	11.6%
ABS Non Investment Grade	2.0%	15.0%	30.0%
Agency CMOs	0.0%	4.0%	15.0%
Agency Debentures & Strips	2.0%	2.0%	3.0%
Agency MBS	2.0%	2.0%	3.0%
CMO Private Label (Investment & Non Investment Grade)	2.0%	5.0%	15.0%
Corporates Investment Grade	3.0%	5.0%	8.5%
Corporates Non Investment Grade	3.0%	8.0%	15.0%
Equities	5.0%	6.0%	13.2%
Money Market	2.0%	3.0%	5.0%
US Treasuries Strips	0.0%	2.0%	3.0%
US Treasuries excluding Strips	2.0%	2.0%	2.1%

Source: Federal Reserve Bank of New York, as of July 2017.

[2] These two collateral look-throughs relate to SEC Rule 2a-7 refer to page 4 for more information.

The Mechanics of Tri-party Repo

BEFORE THE FIRST TRADE

1. The investor and the repo dealer negotiate the currency, size, tenor, collateral, and pricing of the transaction

2. The third-party custodian bank provides the investor and the repo dealer with two accounts

- Collateral Account
- Cash Account

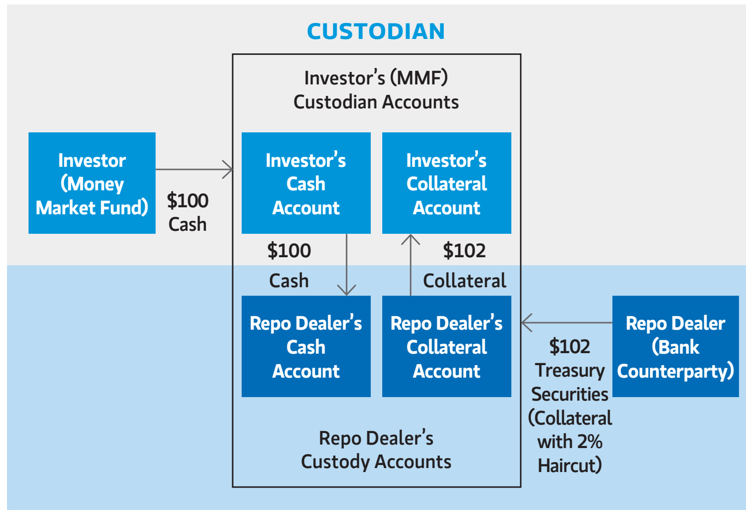
REPO TRADE DATE

3. Investor transfers money into its cash account at the custodian

4. Repo dealer delivers eligible collateral (including the haircut) to the collateral account at the custodian

5. The custodian values the securities and verifies that they comply with the agreed-upon collateral schedule

6. The custodian transfers the collateral to the investor's collateral account and the cash to the repo dealer's cash account

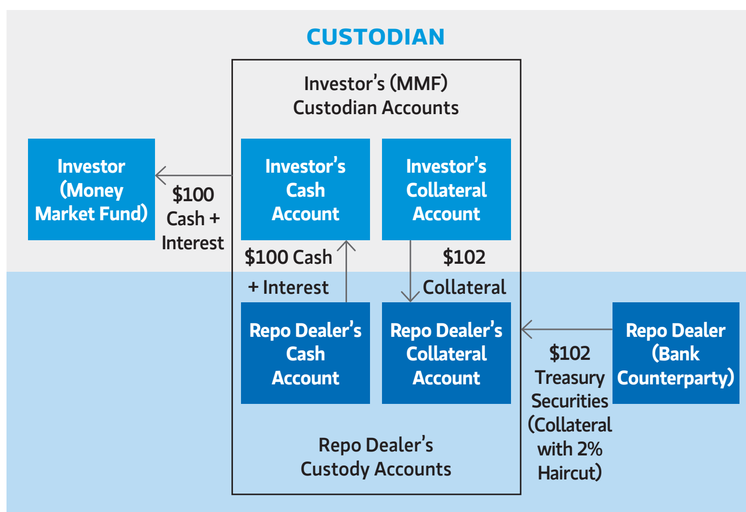


REPO MATURITY DATE

7. The principal amount, plus interest, is transferred from the repo dealer's cash account to the investor's cash account

8. Upon receipt of the cash, the custodian will release the collateral from the investor's account back to the repo

9. On instruction from the investor, the custodian will then send the cash and interest to the investor's bank account



This is provided for illustrative purposes only.

Repo and MMFs

Repos not only offer MMFs an efficient way to manage their liquidity but also help funds fulfill the requirements set forth by Rule 2a-7 under the Investment Company of Act of 1940. Outlined below are some requirements of Rule 2a-7.

- **LIQUIDITY BUCKETS** – Taxable MMFs must maintain daily liquid assets equal to 10% of the portfolio and weekly liquid assets equal to 30% of the portfolio. Overnight and weekly term repo help MMF managers maintain high levels of portfolio liquidity to comply with these rules.
- **COUNTERPARTY EXPOSURE** – MMFs are subject to a 5% maximum exposure limit to any single issuer.
  - In traditional repo, due to the high quality of the collateral, there is a look-through to the underlying securities and the exposure is viewed as that of the collateral, rather than the counterparty.
  - Non-Traditional repo is similar to unsecured debt, in which transactions are subject to the 5% diversification test per issuer at the time of purchase. The exposure limit includes any other securities of the same issuer held in the portfolio.
- **ILLIQUID SECURITIES** – MMFs may only invest up to 5% of the portfolio's assets in illiquid securities. Illiquid securities are securities that cannot be sold or disposed of in the normal course of business within seven calendar days at the approximate value ascribed to it by the fund. Term repo with maturities greater than seven days falls into this category.

About Morgan Stanley Investment Management (MSIM) Global Liquidity Solutions

Since 1975, MSIM has managed money market funds and is dedicated to offering clients unique investment solutions through multi-currency institutional money funds and highly customized solutions. The Global Liquidity Solutions team, which has $166.4 billion[3] in assets under management, is comprised of highly experienced professionals across the U.S. and Europe.

[3] As of July 31, 2017.

Please contact your MSIM Liquidity Relationship Manager at 1.800.236.0992 if you have further questions.

Stable NAV Funds: You could lose money by investing in the Fund. Although the Fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the Fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Funds' sponsor has no legal obligation to provide financial support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time.

Floating NAV Funds: You could lose money by investing in the Fund. Because the share price of the Fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the Fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Funds' sponsor has no legal obligation to provide financial support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time. Shareholders should consult their individual tax advisor to determine whether the portfolios' distributions derived from interest on the U.S. Treasury obligations and U.S. Government securities are exempt from state taxation in their own state.

Please consider the investment objectives, risks, charges and expenses of the portfolios carefully before investing. The prospectus contains this and other information about the portfolios. To obtain a prospectus, download one at morganstanley.com/liquidity or call 1.800.236.0992. Please read the prospectus carefully before investing.

Explore our site at **www.morganstanley.com/liquidity**

1873033 Exp. 08/16/2018 9004226_CH_0817