Margin Requirements

This Bulletin represents Pershing's policy on this subject.

Please review this policy carefully, as it impacts your firm and your clients.

Pershing, a BNY Mellon company, allows you to offer your clients margin accounts. Consult this Bulletin for details on the initial and maintenance requirements for securities on margin.

NOTE: This document is for your firm only and may not be given to third parties.

Contact Pershing's Margin Department regarding anticipated client account margin debit balances of $2,000,000 or more or in connection with requirements for unusual transactions or situations. You may also contact the Margin Department for a list of securities with higher requirements or regarding loans against control or restricted securities.

Equities

If your client elects to purchase equities on margin, refer to the table below for the initial and maintenance requirements associated with each type of equity. The minimum equity requirement is $2,000 for margin accounts.

Type of Security	Initial Requirement	Maintenance Requirement
Stocks Listed on a National Securities Exchange	50% of the net amount	The greater of 30% of the market value or $3 per share Concentrated positions will have higher maintenance requirements.*
Exchange-Traded Funds Leveraged Two Times	50% of the net amount	The greater of 60% of the market value or $3 per share
Other Equities, Warrants, Auction Rate Securities and Exchange-Traded Funds Leveraged Greater Than Two Times or More	100% of the net amount	100% of the market value
Stocks (Listed or Unlisted) Sold Short	50% of the net proceeds	The greater of 35% of the short market value or $5 per share
Exchange-Traded Funds Leveraged Sold Short	50% of the net proceeds	100% of the market value

*Pershing systematically identifies concentrated positions and applies higher margin maintenance requirements. Review the Securities Automated Concentration Requirements at the end of this Bulletin.

Mutual Funds and Unit Investment Trusts (UITs)

Mutual fund and UIT purchases must be made in the cash account and paid in full. They become eligible for margin 30 days after settlement date or payment date, whichever comes later.

Type of Security	Initial Requirement	Maintenance Requirement
Mutual Funds and UITs	50% of the market value, provided the holding period described above is met	The greater of 30% of the market value or $3 per share

When-Issued Securities

If your client elects to purchase when-issued securities in a cash account, refer to the table below for the initial and maintenance requirements.

Type of Security	Initial Requirement	Maintenance Requirement
When-Issued Securities	The greater of 25% of the net amount or $2,000, but not to exceed 100% of the net amount	The greater of 25% of the net amount or $2,000, but not to exceed 100% of the market value

NOTE: When-Issued securities purchased in a margin account have the same initial and maintenance requirements as issued securities.

Fixed Income Securities

If your client elects to purchase fixed income securities on margin, refer to the table below for the initial and maintenance requirements.

Type of Security	Initial Requirement	Maintenance Requirement
Convertible Corporate Bonds		
Listed on a National Securities Exchange	50% of the net amount	30% of the market value
Convertible Bonds Sold Short	50% of the net amount	35% of the market value

Fixed Income Securities (continued)

Type of Security	Initial Requirement	Maintenance Requirement
Convertible Corporate Bonds (continued)		
Convertible Arbitrage Long position on a convertible bond and a short position in its converting common stock	Standard Initial Requirements apply to each leg of the arbitrage	The maintenance requirement is the sum of the following calculations: a. Hedged short common stock: • Investment Grade: 10% • Non-Investment Grade: 20% b. Normal maintenance requirements on the unhedged portion of the bond c. 30% of the loss on the conversion. (Long market value of bond minus short market value of short shares is the loss on conversion)
Non-Convertible-Corporate Bonds		
Interest-Paying Corporate Bonds (Rated No Lower Than BAA3 by Moody's or BBB- by Standard & Poor's® [S&P®])	30% of the net amount	25% of the market value Concentrated positions will have higher maintenance requirements.*
Asset Backed Bonds Private Label CMO/CLO	100% of the net amount	100% of the net amount
Corporate Bonds Sold Short	35% of the net amount	35% of the market value
Zero-Coupon Bonds (Rated No Lower Than BAA3 by Moody's or BBB- by S&P)	The greater of 30% of the net amount or 10% of the face amount	The greater of 25% of the market value or 10% of the face amount

Fixed Income Securities (continued)

Type of Security	Initial Requirement	Maintenance Requirement
Municipal Bonds		
Interest-Paying Municipal Bonds (Rated No Lower Than BAA3 by Moody's or BBB- by S&P)	30% of the net amount	25% of the market value Concentrated positions will have higher maintenance requirements.*
Municipal Zero-Coupon Bonds (Rated No Lower Than BAA3 by Moody's or BBB- by S&P)	The greater of 30% of the net amount or 10% of the face amount	The greater of 25% of the market value or 10% of the face amount
Auction Rate Securities Backed by Fixed Income Products	100% of the net amount	100% of the net amount
Variable Rate Demand Notes/Obligations (VRDN/VRDO)	100% of the net amount	100% of the net amount
Government Securities		
U.S. Government Direct Obligations (Bills, Notes, Bonds)	10% of the net amount	8% of the market value if 20 years to maturity 7% of the market value if 10 years to maturity 6% of the market value if five years to maturity 5% of the market value if three years to maturity 4% of the market value if one year to maturity 3% of the market value if less than one year to maturity
U.S. Government Agency and Pass-Through Bonds (Such as Government National Mortgage Association [GNMA] and Federal National Mortgage Association [FNMA])	15% of the net amount	10% of the market value
U.S. Government Agency Bonds Sold Short	15% of the net amount	10% of the market value
U.S. Government Zero-Coupon Bonds	10% of the face amount	The greater of 7% of the market value or 7% of the face amount

Fixed Income Securities (continued)

Type of Security	Initial Requirement	Maintenance Requirement
U.S. Government Bonds Sold Short	10% of the net amount	8% of the market value if 20 years to maturity 7% of the market value if 10 years to maturity 6% of the market value if five years to maturity 5% of the market value if three years to maturity 4% of the market value if one year to maturity 3% of the market value if less than one year to maturity
U.S. Government Agency REMIC	30% of the net amount	25% of the net amount
U.S. Government Agency REMIC Inverse Floater	100% of the net amount	100% of the net amount
Other Bonds	100% of the net amount	100% of the market value

NOTE: Interest-paying bonds trading below $40 per bond and zero-coupon bonds trading below $10 per bond are not marginable and have 100% initial and maintenance requirements.

*Pershing systematically identifies concentrated positions and applies higher margin maintenance requirements. Review the Securities Automated Concentration Requirements at the end of this Bulletin

Options and Option Strategies

No account is permitted to execute a straddle, spread or uncovered (naked) option transaction without the required margin in the account, including minimum equity of $10,000. Refer to the table below for the initial and maintenance requirements for option transactions.

Option Transactions	Initial and Maintenance Requirements
Long Purchases	Payment must be made in full. During the current expiration cycle, sufficient equity must be in the account before the trade is executed. The cycle begins on the Monday following the prior month's expiration date.
Spreads on European-style Options	Spreads are not permitted on European-style options unless both sides expire at the same time.

Options and Option Strategies (continued)

Option Transactions	Initial and Maintenance Requirements
Debit Spreads	The net premium difference must be paid in full, and a minimum equity of $10,000 is required.
Credit Spreads	The requirement is the greater of 100% of the strike price differential or $10,000 minimum equity.
Complex Spreads	The requirement is the maximum potential loss determined by computing the intrinsic value of the options at price points for the underlying security or index that is set to correspond to every exercise price present in the spread. The intrinsic values are netted at each price point, and the maximum potential loss is the greatest loss, if any. A complex spread must adhere to the following criteria: (1) All option contracts must have the same underlying security or index. (2) All option contracts must be either all American-style or all European-style. (3) All option contracts must be listed. (4) The aggregate underlying contract value of “long” versus “short” contracts within option type(s) must be equal. (5) For complex spreads with American-style options, the “short” options must expire on or before the expiration date of the “long” options. (6) For complex spreads with European-style options, all options must have the same expiration date. A minimum equity of $10,000 is required.

Uncovered Options Listed Equity/Narrow and Broad-Based Index Options	The initial and maintenance requirements are the greater of the following three: 1. The premium plus 30% of the market value of the underlying security, adjusted for the out-of-money amount, 2. But not less than: a. **For Calls**: 15% of the market value of the underlying security plus the premium b. **For Puts**: 15% of the assignment value plus the premium **OR** 3. The Pershing minimum requirement per contract: a. **For Calls**: If the underlying security is currently less than $50 per share, the minimum is $1,000 per contract. If the underlying security price is $50 or more per share, the minimum is $2,000 per contract. b. **For Puts**: If the strike price is less than $50 per share, the minimum is $1,000 per contract. If the strike price is $50 or more per share, the minimum is $2,000 per contract. This requirement should not exceed 100% of the put assignment value.
Listed Equity/Narrow and Broad-Based Based Leveraged ETF Options (2X, 2.5X and 3X Leverage)	The initial and maintenance requirements are the greatest of the following three: 4. The premium plus 60% of the market value of the underlying security, adjusted for the out-of-money amount, 5. But not less than: a. **For Calls**: 30% of the market value of the underlying security plus the premium b. **For Puts**: 30% of the assignment value plus the premium **OR** 6. The Pershing minimum requirement per contract for Broad Based Leveraged ETF Options: c. **For Calls**: If the underlying security is currently less than $50 per share, the minimum is $1,000 per contract. If the underlying security is currently more than $50 per share, the minimum is $2,000 per contract. d. **For Puts**: If the strike price is less than $50 per share, the minimum is $1,000 per contract. If the strike price is more than $50 per share, the minimum is $2,000 per contract. This requirement should not exceed 100% of the put assignment value. Narrow Based Leveraged ETF Option contract minimum is $250 per contract.

<table>
<tr><td>Uncovered Options Based on Volatility Indexes</td><td>
For options based on the Nine-Day Volatility Index (VXST):
The initial and maintenance requirements are the greater of the following two:

The premium plus 50% of the market value of the underlying security, adjusted for the out-of-money amount,
But not less than:
<ol type="a">
For Calls: 30% of the market value of the underlying security plus the premium
For Puts: 30% of the assignment value plus the premium

For options based on 30-Day Volatility Indexes (VIX, VXN, VXD, RVX):
The initial and maintenance requirements are the greater of the following three:

The premium plus 40% of the market value of the underlying security, adjusted for the out-of-money amount,
But not less than:
<ol type="a">
For Calls: 25% of the market value of the underlying security plus the premium
For Puts: 25% of the assignment value plus the premium

OR
<ol start="3">
The Pershing minimum requirement per contract:
<ol type="a">
For Calls: If the underlying security is currently less than $50 per share, the minimum is $1,000 per contract. If the underlying security is currently more than $50 per share, the minimum is $2,000 per contract.
For Puts: If the strike price is less than $50 per share, the minimum is $1,000 per contract. If the strike price is more than $50 per share, the minimum is $2,000 per contract. This requirement should not exceed 100% of the put assignment value.

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<tr><td>Straddles</td><td>The requirement is the greater of the requirement on the put or call, plus the premium on the other side.</td></tr>
<tr><td>Collars</td><td>

The initial requirement on the underlying security is 50% of the purchase amount, plus or minus the net option premiums.
The maintenance requirement for the underlying security is the lesser of 10 percent of the aggregate exercise price of the put plus the put “out-of-the-money” amount, or 25 percent of the call aggregate exercise price.

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<tr><td>Covered Leaps (with an expiration period greater than nine months)</td><td>100% of the difference between the intrinsic value and the long-term equity anticipation (LEAP) security market value.</td></tr>
<tr><td>All Other Options</td><td>Contact Pershing’s Margin Department.</td></tr>
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Foreign Currency Margin Balances

Pershing supports margin debits in the following foreign currencies. These currencies have an add-on maintenance requirement outlined below for their U.S. dollar equivalent value. The add-on maintenance requirement is also applied to credit balances when carried in the margin type.

Foreign Currencies Approved for Margin and Their Add-on Maintenance Requirement	Australian Dollar	AUD	5%
	Canadian Dollar	CAD	5%
	Swiss Franc	CHF	5%
	Danish Krone	DKK	5%
	Euro Currency	EUR	5%
	British Pound	GBP	5%
	Hong Kong Dollar	HKD	5%
	Japanese Yen	JPY	5%
	Norwegian Krone	NOK	5%
	New Zealand Dollar	NZD	5%
	Mexican Peso	MXN	100%
	Singapore Dollar	SGD	5%
	Swedish Krona	SEK	5%
All other currencies have a 100% USDE maintenance requirement add-on and should not be carried in the margin type. If a non-approved currency debit balance is in the margin type, the USDE value will be subtracted from the equity in the account and 100% of the USDE value will be haircut from the Maintenance Surplus.			

NOTES:

- Special requirements apply to accounts that are classified as belonging to pattern day traders. For further information, please contact Pershing's Margin Department.
- Concentrated or volatile securities may be subject to higher margin requirements.
- Requirements set forth in this document are subject to change by Pershing at its sole discretion at any time.

Securities Automated Concentration Requirements

Concentrated positions are composed of equities, municipal bonds and corporate bonds. Positions that meet the below parameters will be identified and the concentrated positions will be reviewed for liquidity. Liquidity is based on the securities' average daily volume for the prior eight weeks compared to the size of the position held.

Equity Matrix

Shares Held as Percent of Average Eight Week Daily Volume	Recommended Maintenance Requirement Based on Percent the Position Represents of Total Market Value and Rating of Security			
Equities	25%-50% Equities Rated B+ & Above	25%-50% Equities Rated B & Below	50%-100% Equities Rated B+ & Above	50%-100% Equities Rated B & Below or Unrated
Under 20%	30	30	30	30
20% & Under 50%	30	40	40	50
50% & Under 100%	40	50	50	60
100% & Under 150%	50	60	60	75
150% & Under 200%	60	75	75	100
200% & Under 250%	75	100	100	100
250% & Over	100	100	100	100
Securities below $3 per Share	100	100	100	100

Fixed Income Matrix

Recommended Maintenance Requirement Based on Percentage the Position Represents of Total Market Value		
Corporate/Municipal Bonds	25%-50%	50%-100%
Requirement	40	50

Fixed income positions identified as concentrated will use the lowest rating available from S&P or Moody's to determine investment grade status. A rating below investment grade will increase the maintenance requirement to 100%.

Report Center

Two daily reports will be generated through Report Center.

Daily Maintenance Requirement Updates for IBDs (ID: GMA135D2) indicates those positions identified to have increased requirements applied at the close of business that day.

Accounts With Maintenance Rate Locked in for IBDs (ID: GMA135D3) indicates those positions where exceptions have been granted to the suggested maintenance requirement schedule.

Exceptions to Increased Requirements

If you believe there should be an exception to an elevated maintenance requirement, please contact the Credit/Risk group for review by telephone at (201) 413-4391.