



**THE FOUNDATION
FOR SECURE
MARKETS**

#50450

DATE: May 19, 2022

SUBJECT: STOCK SPLITS AND RBH/CPM MINIMUM CHARGES

Due to the recently announced stock splits in Amazon.com, Inc. (“AMZN”), Alphabet Inc. Class A (“GOOGL”), and Alphabet Inc. Class C Capital Shares (“GOOG”), OCC is providing the following review of minimum charges in TIMS and the potential impact to Risk Based Haircuts (“RBH”) and Customer Portfolio Margin (“CPM”) requirements. These anticipated splits are described in OCC Information Memos 50168, 50051, and 50052 respectively.

RBH and CPM include a per contract minimum charge that is multiplied by an option’s contract size. The U.S. Securities and Exchange Commission’s Net Capital Rule (Appendix A to Exchange Act Rule 240.15c3-1) sets the minimum charge at \$0.25 for proprietary accounts and \$0.375 for non-proprietary accounts in RBH and FINRA Rule 4210 sets it to \$0.375 for CPM. A standard size equity option contract delivers 100 shares and has a per-contract minimum of \$25.00 or \$37.50. However, for long option positions the minimum charge is equal to the option premium, if the premium is less than the calculated contract minimum.

In a TIMS equity class group, such as AMZN or GOOG, the class group’s requirement is the greater of the risk charge or minimum charge. The class group’s risk charge is equal to the largest portfolio loss across the 10 underlying theoretical price points. Please see the RBH/CPM User Guide for additional explanation of the TIMS methodology (<https://www.theocc.com/Risk-Management/RBH-and-CPM-Documentation>).

If a stock split is effective on a security underlying an option, option positions may be adjusted by reducing existing strikes by the stock split ratio and proportionately increasing the number of contracts. For example, in the case of a 20-for-1 stock split, the position of an investor holding 10 call option contracts at a strike of 2500 prior to a split may increase to 200 (i.e., 10 X 20) call option contracts at a strike of 125 (i.e., 2500 / 20) as a result of the contract adjustment for the stock split. The adjustment is intended to maintain the economic value of the position but may result in a larger minimum charge for the class group due to the increase in the number of contracts resulting from the contract adjustment. Depending on the portfolio, the risk charge may continue to be greater than the new minimum charge for the class group, in which case the adjustment for the split will have no impact on the overall RBH or CPM requirement. However, for portfolios where the overall requirement is already driven by the minimum charge or where the minimum charge and risk charge are similar, the increase to the number of contracts resulting from a stock split may result in an increased overall requirement.

To avoid unexpected changes in RBH and CPM requirements, it is important that account holders evaluate their portfolios and determine the impact of the change in the class group minimum charge within the affected equity class groups prior to the contract adjustments stemming from these announced splits being effected. This can be performed by multiplying the existing class group minimum by the anticipated split ratio (currently 20 for all three anticipated corporate actions) and comparing to the current risk charge.

The following three examples demonstrate the impact of the contract adjustment on sample portfolios. In each of these examples, the pre-corporate action minimum and risk charges are displayed followed by the post-corporate action minimum and risk charges.

In the first example, the pre-adjustment minimum charge of \$150 is less than the risk charge of \$283 from the down 5 underlying price point. After the adjustment the number of shares has increased by 20X, but the Net Asset Value of the portfolio has not changed nor has the risk charge. However, the minimum charge is now \$3,000. So, the regulatory minimum requirement for the portfolio has increased from \$283 to \$3,000 in a customer portfolio margin account.

Strike	C/P	Qty	Price	NAV	Requirement	Minimum										
						Charge	-5	-4	-3	-2	-1	1	2	3	4	5
2600	P	-2	\$20,288	-\$40,576		-\$75.00	-\$54,485	-\$41,599	-\$29,580	-\$18,552	-\$8,606	\$7,871	\$14,426	\$19,934	\$24,483	\$28,180
2520	P	1	\$16,200	\$16,200		-\$37.50	\$24,476	\$18,487	\$13,000	\$8,059	\$3,690	-\$3,345	-\$6,061	-\$8,302	-\$10,120	-\$11,573
2680	P	1	\$25,056	\$25,056		-\$37.50	\$29,726	\$22,918	\$16,466	\$10,441	\$4,905	-\$4,533	-\$8,402	-\$11,718	-\$14,509	-\$16,821
				\$680	-\$283	-\$150.00	-\$283	-\$194	-\$114	-\$52	-\$11	-\$7	-\$37	-\$86	-\$146	-\$214
130	P	-40	\$1,014	-\$40,576		-\$1,500.00	-\$54,485	-\$41,599	-\$29,580	-\$18,552	-\$8,606	\$7,871	\$14,426	\$19,934	\$24,483	\$28,180
126	P	20	\$810	\$16,200		-\$750.00	\$24,476	\$18,487	\$13,000	\$8,059	\$3,690	-\$3,345	-\$6,061	-\$8,302	-\$10,120	-\$11,573
134	P	20	\$1,253	\$25,056		-\$750.00	\$29,726	\$22,918	\$16,466	\$10,441	\$4,905	-\$4,533	-\$8,402	-\$11,718	-\$14,509	-\$16,821
				\$680	-\$3,000	-\$3,000.00	-\$283	-\$194	-\$114	-\$52	-\$11	-\$7	-\$37	-\$86	-\$146	-\$214

In the second example, the pre-adjustment requirement is driven by the risk charge of \$226. Following the adjustment, the requirement is driven by the minimum charge of \$3000. This example uses the per-contract minimum of \$0.375 required for a customer portfolio margin account.

Strike	C/P	Qty	Price	NAV	Requirement	Minimum										
						Charge	-5	-4	-3	-2	-1	1	2	3	4	5
1300	C	1	\$122,361	\$122,361		-\$37.50	-\$37,326	-\$29,929	-\$22,489	-\$15,018	-\$7,523	\$7,513	\$15,047	\$22,588	\$30,133	\$37,683
3300	C	-1	\$760	-\$760		-\$37.50	\$728	\$693	\$628	\$513	\$324	-\$419	-\$1,057	-\$1,939	-\$3,115	-\$4,631
1300	P	-1	\$134	-\$134		-\$37.50	-\$473	-\$311	-\$192	-\$104	-\$40	\$42	\$67	\$85	\$98	\$108
3300	P	1	\$78,536	\$78,536		-\$37.50	\$37,386	\$29,830	\$22,274	\$14,749	\$7,307	-\$7,192	-\$14,163	-\$20,886	-\$27,309	-\$33,386
				\$200,003	-\$226	-\$150.00	\$315	\$283	\$221	\$140	\$68	-\$56	-\$106	-\$152	-\$193	-\$226
65	C	20	\$6,118	\$122,361		-\$750.00	-\$37,326	-\$29,929	-\$22,489	-\$15,018	-\$7,523	\$7,513	\$15,047	\$22,588	\$30,133	\$37,683
165	C	-20	\$38	-\$760		-\$750.00	\$728	\$693	\$628	\$513	\$324	-\$419	-\$1,057	-\$1,939	-\$3,115	-\$4,631
65	P	-20	\$7	-\$134		-\$750.00	-\$473	-\$311	-\$192	-\$104	-\$40	\$42	\$67	\$85	\$98	\$108
165	P	20	\$3,927	\$78,536		-\$750.00	\$37,386	\$29,830	\$22,274	\$14,749	\$7,307	-\$7,192	-\$14,163	-\$20,886	-\$27,309	-\$33,386
				\$200,003	-\$3,000	-\$3,000.00	\$315	\$283	\$221	\$140	\$68	-\$56	-\$106	-\$152	-\$193	-\$226

The final example is for a proprietary RBH account using the \$0.25 per contract minimum. In this example, the portfolio's requirement is driven by the risk charge both before and after the contract adjustment.

Strike	C/P	Qty	Price	NAV	Requirement	Minimum										
						Charge	-5	-4	-3	-2	-1	1	2	3	4	5
2200	C	1	\$38,148	\$38,148		-\$25.00	-\$24,836	-\$20,902	-\$16,415	-\$11,416	-\$5,955	\$6,119	\$12,619	\$19,358	\$26,288	\$33,370
2700	P	-1	\$26,353	-\$26,353		-\$25.00	-\$30,291	-\$23,406	-\$16,857	-\$10,717	-\$5,050	\$4,680	\$8,699	\$12,160	\$15,089	\$17,525
				\$11,794	-\$55,127	-\$50.00	-\$55,127	-\$44,308	-\$33,272	-\$22,133	-\$11,005	\$10,799	\$21,318	\$31,518	\$41,377	\$50,895
110	C	20	\$1,907	\$38,148		-\$500.00	-\$24,836	-\$20,902	-\$16,415	-\$11,416	-\$5,955	\$6,119	\$12,619	\$19,358	\$26,288	\$33,370
135	P	-20	\$1,318	-\$26,353		-\$500.00	-\$30,291	-\$23,406	-\$16,857	-\$10,717	-\$5,050	\$4,680	\$8,699	\$12,160	\$15,089	\$17,525
				\$11,794	-\$55,127	-\$1,000.00	-\$55,127	-\$44,308	-\$33,272	-\$22,133	-\$11,005	\$10,799	\$21,318	\$31,518	\$41,377	\$50,895

For questions regarding this memo, Clearing Members may contact Member Services at 1-800-544-6091 or, within Canada, at 1-800-424-7320, and email memberservices@theocc.com or pricingandmargins@theocc.com.