

Comparison of Final Margin Rules for Uncleared Swaps Issued by the CFTC and the Prudential Regulators

Category	PR Margin Rule	CFTC Margin Rule
Products Covered	Uncleared swaps entered into on or after the compliance dates of the rule	Uncleared swaps entered into on or after the compliance dates of the rule
Regulated Entities	Prudentially regulated Swap Dealers (“SDs”), Security-Based Swap Dealers (“SBSBs”), Major Swap Participants (“MSPs”), and Major Security-Based Swap Participants (“MSBSPs”) and their counterparties (“Covered Swap Entities” or “CSE”) Prudential regulators include the Fed, FDIC, OCC, FCA, and FHFA	Non-prudentially regulated SDs and MSPs (“SD/MSP”)
Compliance Dates	<p><u>IM & VM:</u> September 1, 2016 where the CSEs and its affiliates (“Parties”) have an average daily aggregate notional amount of uncleared swaps, uncleared security-based swaps, foreign exchange forwards, and foreign exchange swaps (“Covered Swaps”) for March, April, and May 2016 exceeding \$3 trillion</p> <p><u>VM:</u> March 1, 2017 for CSEs engaging in covered swaps with any other counterparty</p> <p><u>IM:</u></p> <ul style="list-style-type: none"> • September 1, 2017 where the Parties’ covered swaps for March, April, and May 2017 exceed \$2.25 trillion • September 1, 2018 where the Parties’ covered swaps for March, April, and May 2018 exceed \$1.5 trillion • September 1, 2019 where the Parties’ covered swaps for March, April, and May 2019 exceed \$.75 trillion • September 1, 2020 for any other CSEs 	<p><u>IM & VM:</u> September 1, 2016 where the SD/MSPs and its affiliates and its counterparty and all its affiliates (“Parties”) have an average daily aggregate notional amount of uncleared swaps, uncleared security-based swaps, foreign exchange forwards, and foreign exchange swaps (“Covered Swaps”) for March, April, and May 2016 exceeding \$3 trillion</p> <p><u>VM:</u> March 1, 2017 for SD/MSPs engaging in covered swaps with any other counterparty</p> <p><u>IM:</u></p> <ul style="list-style-type: none"> • September 1, 2017 where the Parties’ covered swaps for March, April, and May 2017 exceed \$2.25 trillion • September 1, 2018 where the Parties’ covered swaps for March, April, and May 2018 exceed \$1.5 trillion • September 1, 2019 where the Parties’ covered swaps for March, April, and May 2019 exceed \$.75 trillion • September 1, 2020 for any other SD/MSPs
Capital	Existing regulatory capital rules apply; subject to revisions per Basel	<p>The CFTC did not re-propose its capital rule, however, we expect them to issue a separate final rule in 2016. Below are highlights from the 2011 proposal</p> <p><u>May 2011 Capital Rule:</u> capital requirements will likely be retrospective</p> <p><u>SD/MSPs that are also FCMs:</u> must meet existing FCM requirements for minimum level of capital, which is the greatest of the following:</p> <ul style="list-style-type: none"> • \$20 million (\$20M); • The amount required for FCMs that also act as retail FX exchange dealers; • 8% of the risk margin required for customer and non-customer exchange-traded futures positions and OTC swap positions cleared by a DCO; • Adjusted net capital required by a registered futures association of which the FCM is a member; and • For a BD/FCM, the amount of net capital required by SEC rules

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		<p><u>SD/MSPs that are not FCMs and are nonbank subsidiaries of U.S. bank holding companies</u>: must meet the same capital requirements that U.S. banking regulations apply to the bank holding company (generally a minimum ratio of qualifying total capital to risk-weighted assets of 8% of which at least half should be Tier 1 capital and a minimum fixed dollar amount of at least \$20M of Tier 1 capital)</p> <p><u>SD/MSPs that are neither FCMs nor bank holding company subsidiaries</u>: must maintain tangible net equity (net equity excluding intangibles like goodwill) equal to \$20M, plus additional amounts for market risk and OTC derivatives credit risk</p>
<p>Initial Margin Thresholds by Entity</p>	<p>CSE ↔ CSE – the greater of zero or the IM collection amount for covered swaps [minus] the \$50M threshold (not including any portion for the IM threshold already applied by the CSE or its affiliates for covered swaps with the counterparty or its affiliates)</p> <p>CSE ↔ “financial end-user with material swaps exposure (MSE)” – same as CSE ↔ CSE</p> <p>CSE ↔ “financial end-user without MSE” and “other counterparties” – determined by the CSE to appropriately address the credit risk posed by the counterparty and the risks of swap activity</p>	<p>SD/MSP ↔ SD/MSP and financial end-user with MSE – \$50M threshold resulting from all uncleared swaps between a SD/MSP and its margin affiliates (MA), and a covered counterparty and its MA on the other</p> <p>Note: for the purposes of this calculation, an entity shall not count a swap that is exempt pursuant to § 23.150(b)</p>
<p>Dealer to Dealer</p>	<p style="text-align: center;">CSE ↔ CSE or SD/MSP</p> <p><u>2-way margining required</u> for IM and daily for VM</p> <p><u>3rd party collateral segregation (IM) required</u> for both counterparties. No rehypothecation allowed</p>	<p style="text-align: center;">SD/MSP ↔ SD/MSP</p> <p><u>2-way margining required</u> for IM and daily for VM</p> <p><u>3rd party collateral segregation (IM) required</u> for both counterparties. No rehypothecation allowed</p>

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Dealer to Financial End-User with MSE	<p align="center">CSE ↔ Financial End-User with MSE</p> <p><u>Financial end-user</u> is a non-swap entity that qualifies under a 12-prong test. Please note that under the 11th prong, an entity, person, or arrangement that raises money from investors, accepts money from clients, or uses its own money primarily for investing or trading or facilitating the investing or trading qualifies as a financial end-user</p> <p><u>With MSE:</u> an entity and its affiliates (a one time calculation to avoid double-counting affiliate swaps) have an average daily aggregate notional amount of covered swaps with all counterparties for June, July and August of the previous calendar year that exceed \$8 billion</p> <p><u>2-way margining required</u> for IM and daily for VM</p> <p><u>3rd party collateral segregation (IM) required</u> for both counterparties. No rehypothecation allowed</p>	<p align="center">SD/MSP ↔ Financial End-User with MSE</p> <p><u>Financial end-user</u> is a non-swap entity counterparty that qualifies under a 12-prong test. Please note that under the 11th prong, an entity, person, or arrangement that raises money from investors, accepts money from clients, or uses its own money primarily for investing or trading or facilitating the investing or trading qualifies as a financial end-user</p> <p><u>With MSE:</u> an entity and its MA have an average daily aggregate notional amount of covered swaps with all counterparties for June, July and August of the previous calendar year that exceed \$8 billion</p> <p><u>2-way margining required</u> for IM and daily for VM</p> <p><u>3rd party collateral segregation (IM) required</u> for both counterparties. No rehypothecation allowed</p>
Dealer to Financial End-User without MSE	<p align="center">CSE ↔ Financial End-User without MSE</p> <p><u>IM:</u> same as other counterparties</p> <p><u>VM:</u> daily for VM</p>	<p align="center">SD/MSP ↔ Financial End-User without MSE</p> <p><u>IM:</u> same as non-financial end-user</p> <p><u>VM:</u> daily for VM</p>
Dealer to Other Counterparties/ Non-Financial End-User	<p align="center">CSE ↔ Other Counterparties</p> <p>Applies to a non-financial entity that uses the swaps to hedge or mitigate commercial risk, as well as sovereigns and multilateral development banks</p> <p><u>No regulatory IM/VM requirement:</u> a CSE must collect only at times it determines necessary to address the credit risk posed by the counterparty and the risks of such uncleared swaps</p>	<p align="center">SD/MSP ↔ Non-Financial End-User</p> <p><u>Non-financial end-user</u> is any counterparty that is not a SD, MSP, or financial end-user</p> <p><u>No regulatory IM/VM requirement:</u> no hypothetical margin calculation and documentation requirements</p>
Initial Margin Models	<p>Can use either an internal (i) “Initial Margin Model” (“Model”) or (ii) standardized amounts on a daily basis pursuant to Appendix A</p> <p><i>Initial Margin Model:</i> (i) must demonstrate that the model satisfies necessary requirements on an ongoing basis; (ii) obtain approval by a prudential regulator; and (iii) notify a prudential regulator in writing 60 days prior to any material changes to the model</p> <ul style="list-style-type: none"> • Equal to potential future exposure, based on a 99% confidence interval over a 10-day period or the maturity date (whichever is shorter) • Data used to calibrate the model is based on equally weighted historical 	<p>Can use either an internal (i) “Risk-Based Model” or a (ii) Table-Based Method</p> <p><i>Risk-Based Model:</i> (i) must demonstrate that the model satisfies all of the requirements on an ongoing basis; (ii) obtain the written approval of the Commission or a registered futures association (RFA); and (iii) notify the Commission and the RFA in writing 60 days prior to any material changes to the model</p> <ul style="list-style-type: none"> • Equal to potential future exposure, based on a 99% confidence interval over a 10-day period or the maturity date (whichever is shorter) • Data used to calibrate the model is based on equally weighted observation period of

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	<p>observation of at least one year and not more than five years</p> <ul style="list-style-type: none"> • Use risk factors sufficient to measure all material price risks • May calculate IM covered by the Eligible Master Netting Agreement (EMNA) • Review data used to calibrate the model at least annually • A prudential regulator, in its sole discretion, may require a CSE to collect additional IM • Review its model periodically, but no less than annually • Maintain a risk control unit independent from the business trading units • Maintain an internal audit function that at least annually assesses the IM model • Must document all material aspects and escalation procedures of its model <p>A prudential regulator, in its sole discretion, may rescind its approval of any IM model or impose additional conditions or requirements</p>	<p>at least one year and not more than five years</p> <ul style="list-style-type: none"> • Use risk factors sufficient to measure all material price risks • May calculate IM covered by the EMNA • Review data used to calibrate the model at least annually • The Commission or the RFA, in its sole discretion, may require a CSE to collect additional IM • Review its model periodically, but no less than annually • Maintain a risk management unit independent from the business trading units • Maintain an internal audit function that at least annually assesses the IM model • Must document all material aspects and escalation procedures of its model <p><i>Table-Based Method:</i> a standardized IM schedule can be found in the final rule</p> <ul style="list-style-type: none"> • Net to gross ratio adjustment: for multiple uncleared swaps subject to an EMNA, IM under the table is computed with the following formula - $IM = 0.4 [x] \text{ gross IM} [+] 0.6 [x] \text{ net-to-gross ratio } [x] \text{ gross IM}$ <p>The Commission or the RFA may rescind approval of any IM model or impose additional conditions or requirements</p>
<p>Variation Margin</p>	<p><u>Variation margin amount</u> means the cumulative mark-to-market change in value to a CSE of swap activity from the date entered into [minus] the value of all VM previously collected [plus] the value of all VM previously posted with respect to such covered swaps</p> <p><u>Frequency</u></p> <ul style="list-style-type: none"> • Collect from CSEs or financial end-users each business day, beginning on or before the business day following the day of execution and ending on the date the swap activity terminates or expires • Collect from other counterparties only at times a CSE determines appropriately to address the credit risk posed by the counterparty and the risks of swap activity 	<p><u>Variation margin amount</u> means the cumulative mark-to-market change in value to a SD/MSP of an uncleared swap, as measured from the date it is entered into, [minus] the value of all VM previously collected [plus] the value of all VM previously posted with respect to such swaps</p> <p><u>Means of calculation</u></p> <ul style="list-style-type: none"> • Each business day, a SD/MSP must calculate for itself and each counterparty that is a SD/MSP or financial end-user • Must use methods, procedures, rules, and inputs that rely on recently-executed transactions, valuations provided by independent 3rd parties or other objective criteria • SD/MSP will have alternative methods if any input required to value a swap is unavailable <p><u>Control Mechanisms</u></p> <ul style="list-style-type: none"> • Each SD/MSP will create and maintain documentation setting forth variation methods with sufficient specificity to allow the counterparty, the Commission, the RFA, and any applicable prudential regulator to calculate a reasonable

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		<p>approximation of the margin requirement independently</p> <ul style="list-style-type: none"> • Each SD/MSP will evaluate the reliability of its data sources at least annually, and make adjustments as appropriate • The Commission or the RFA at any time may require a SD/MSP to provide further data or analysis about its methods or a data source
<p>Reinvestment of Margin Assets and Location of Collateral (IM)</p>	<p><u>IM posted and collected by the CSE:</u> IM must be held by a 3rd party custodian that is not an affiliate of the CSE, its counterparty, or their affiliates</p> <p><u>Custodial agreement:</u></p> <ul style="list-style-type: none"> • Prohibits rehypothecation by the 3rd party custodian • Cash collateral may be held in a general deposit account with the custodian under certain conditions • Allows substitution and reinvestment of assets only subject to certain requirements and applicable haircuts • Must be legally valid, binding and enforceable under laws of all relevant jurisdictions including for bankruptcy, insolvency, or similar proceeding 	<p><u>IM posted and collected by the SD/MSP:</u> IM must be held by a 3rd party custodian that is not the SD/MSP, counterparty, or MA of the SD/MSP or its counterparty</p> <p><u>Custodial agreement:</u></p> <ul style="list-style-type: none"> • Prohibits rehypothecation by the 3rd party custodian • Cash collateral may be held in a general deposit account with the custodian under certain conditions • Allows substitution and reinvestment of assets only subject to certain requirements and applicable haircuts • Must be legally valid, binding and enforceable under laws of all relevant jurisdictions including for bankruptcy, insolvency or similar proceeding
<p>Type of Collateral</p>	<p><u>Eligible collateral</u></p> <p>Swap Entity (SE) → CSE</p> <ul style="list-style-type: none"> • VM: cash in any major currency or the currency of settlement • IM: cash, gold, certain U.S. government debt securities, certain foreign government debt securities, certain corporate debt securities, certain listed securities, shares in certain pooled investment vehicles <p>Financial End-Users → CSE</p> <ul style="list-style-type: none"> • VM & IM: cash, gold, certain U.S. government debt securities, certain foreign government debt securities, certain corporate debt securities, certain listed securities, shares in certain pooled investment vehicles <p><u>Excess collateral:</u> a CSE may collect IM and VM that is not required pursuant to this rule in any form of collateral</p> <p><u>Haircuts:</u> all of the listed types of collateral, other than immediately available cash funds are subject to discounts or haircuts (identified in Appendix B) to determine their value for margin purposes</p>	<p><u>Eligible collateral</u></p> <p>SD/MSP → SD/MSP</p> <ul style="list-style-type: none"> • VM: cash in any major currency or the currency of settlement • IM: cash, gold, certain U.S. government debt securities, certain foreign government debt securities, certain corporate debt securities, certain listed securities, shares in certain pooled investment vehicles <p>Financial End-Users → SD/MSP</p> <ul style="list-style-type: none"> • VM & IM: cash, gold, certain U.S. government debt securities, certain foreign government debt securities, certain corporate debt securities, certain listed securities, shares in certain pooled investment vehicles <p><u>Excess collateral:</u> a SD/MSP may collect IM and VM that is not required pursuant to this rule in any form of collateral</p> <p><u>Haircuts:</u> any eligible collateral collected or posted will be subject to discounts or haircuts (schedule provided in the final rule) to determine their value for margin purposes</p>

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Minimum Transfer	A CSE is not required to collect or post margin unless the total amount of margin required is greater than \$500,000	A SD/MSP is not required to collect or post margin unless the total amount of margin required is greater than \$500,000
Trading Documentation	CSE must execute trading documentation with each counterparty (either a SE or financial end-user) that includes credit support arrangements, methods for determining the value of each swap, and procedures for settling disputes over the value of the swaps or the assets collected or posted as IM or VM	<p>Each SD/MSP must execute documentation with each counterparty that complies with the requirements of § 23.504</p> <ul style="list-style-type: none"> SD/MSP ↔ SD/MSP or financial end-user: § 23.150 – 23.161 <p>Contents of the documentation must include methods, procedures, rules, inputs, and data sources used to determine VM and IM (if applicable) values; and procedures to resolve any disputes regarding valuation of uncleared swaps, assets collected or posted</p>
Cross-Border Interactions	<p><u>Excluded transactions</u></p> <p>Any foreign uncleared swap or security-based swap of a foreign CSE (please click here for additional details)</p> <p><u>Substituted compliance</u></p> <p>A CSE may comply with a foreign regulatory framework for transactions that the prudential regulators jointly, conditionally or unconditionally, determine to satisfy the requirements of this rule</p> <p>(The rule provides standards guiding the prudential regulators’ determination and a list of eligible CSEs)</p> <p><u>Request for determination</u></p> <p>An eligible CSE may request that the prudential regulators make a determination pursuant to this rule</p> <p><u>Segregation</u></p> <p>A prudential regulator may provide a CSE relief from the segregation requirements under this rule if the CSE meet certain conditions</p>	<p><u>U.S. SD/MSPs</u></p> <p>Margin rule applies, but substituted compliance is available for IM posted to (but not collected from) any non-U.S. counterparty whose obligations <i>are not</i> guaranteed by a U.S. Person (three element test)</p> <p>Note: margin rule applies to non-U.S. SD/MSPs with a U.S. Person guarantee</p> <p><u>Non-U.S. SD/MSPs</u></p> <p>Margin rule applies, unless the swap is not guaranteed by a U.S. Person and all four conditions of the exclusion rule are satisfied</p> <p>Note: margin rule still applies to non-U.S. SD/MSPs satisfying the exclusion rule if it is not covered by a comparability determination and enters into certain inter-affiliate swaps</p> <p><u>Comparability Determination</u></p> <p>Eligibility: 1) SD/MSPs eligible for substituted compliance; or 2) SD/MSPs under direct supervisory authority of a foreign regulatory authority</p> <p>The Commission sets forth a standard of review, a reliance regime, conditions, modifications, and a delegation of authority to DSIO</p> <p><u>Non-segregation jurisdictions</u></p> <p>IM posting and segregation requirements addressing non-U.S. Persons do not apply to an uncleared swap of a foreign consolidated subsidiary or a foreign branch of a U.S. SD/MSP if it would be legally or operationally impracticable and certain conditions are met</p> <p>For four broad risk categories, the total outstanding notional value of all uncleared swaps may not exceed 5% of the SD/MSPs total outstanding notional value</p>

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		<p><u>Non-netting jurisdictions</u></p> <p>If the relevant netting arrangement is unavailable upon sufficient legal review, the SD/MSPs must collect margin on a gross basis, but may post margin on a net basis</p>
<p>Inter-Affiliates</p>	<p><u>IM</u></p> <p>A CSE is required to collect and post IM from its affiliate that is a CSE or a SE</p> <p>A CSE is not required to post IM with a counterparty that is a non-CSE affiliate, but must calculate the IM required to be posted to an affiliate that is a financial end-user with MSE and provide documentation of that amount to each affiliate on a daily basis</p> <p><u>IM threshold</u> equals the aggregate credit exposure of \$20M resulting from all covered swaps transactions between the CSE and that affiliate</p> <p>A CSE may apply the \$20M IM threshold to each of its affiliates</p> <p><u>VM</u></p> <p>A CSE must collect and post VM with any counterparty that is an affiliate</p> <p><u>Custodian</u></p> <p>A CSE that collects non-cash IM from an affiliate may serve as custodian or have an affiliate serve as custodian</p> <p><u>Model holding period</u></p> <p>A CSE may use a holding period in its margin model equal to the shorter of 5-days or the portfolio's maturity for any swaps with an affiliate subject to the mandatory clearing exemption, provided the IM for these swaps are calculated separately</p> <p><u>Netting arrangements</u></p> <p>Any netting portfolio that contains a model holding period equal to the shorter of 5-days or the maturity of the transaction must be identified and separate from any other netting portfolio</p> <p><u>Standardized amounts</u></p> <p>A CSE using the standardized approach must calculate the amount of IM required to be collected with a given affiliate counterparty on a daily basis pursuant to Appendix A with gross IM multiplied by 0.7</p>	<p><u>Margin affiliate:</u> a company is an MA of another company if:</p> <ul style="list-style-type: none"> • Either company consolidates the other on a financial statement prepared in accordance with accounting principles or similar standards; • Both companies are consolidated with a 3rd company on a financial statement prepared with such principles or standards; • For a company not subject to such principles or standards, if consolidation would have occurred if the above principles or standards had been applied <p><u>No IM requirement if:</u></p> <ul style="list-style-type: none"> • Swaps are subject to a centralized risk management program reasonably designed to monitor and to manage the risks associated with the inter-affiliate swaps; and • The SD/MSP exchanges VM with the MA <p><u>IM:</u> required on any MA that is an SE subject to the rules of a prudential regulator</p> <p><u>VM:</u> each SD/MSP must post and collect VM with each MA that is a SD/MSP or a financial end-user</p> <p><u>Foreign margin affiliates</u></p> <p>Outward facing MA means an MA that enters into swaps with 3rd parties</p> <p>Each SD/MSP must collect IM (§ 23.150 – 23.161) from each MA if:</p> <ul style="list-style-type: none"> • The MA is a financial end-user; • The MA enters into swaps with 3rd parties or with any other MA that directly or indirectly enters into swaps with 3rd parties; and • Any such outward facing MA is located in a jurisdiction that the Commission has not found to be eligible for substituted compliance and does not collect IM in accordance with Commission rules <p><u>Custodian:</u> for IM collected, the custodian may be the SD/MSP or an MA of the SD/MSP</p>