TESTIMONY
OF
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EXECUTIVE CHAIRMAN
CME GROUP INC.
BEFORE THE
Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises of the
HOUSE COMMITTEE ON FINANCIAL SERVICES
May 11, 2010

I am Terrence A. Duffy, executive chairman of CME Group Inc. Thank you Chairman Kanjorski and Ranking Member Garrett for inviting us to testify today. You asked us to discuss issues surrounding the activity in the equity markets on Thursday, May 6, 2010, including our thoughts on market integrity and how our markets functioned on that date, the effectiveness of the existing market structure rules and the role of technology in our markets.

CME Group is the world's largest and most diverse derivatives marketplace. We are the parent of four separate regulated exchanges, including Chicago Mercantile Exchange Inc. ("CME"), the Board of Trade of the City of Chicago, Inc. ("CBOT"), the New York Mercantile Exchange, Inc. ("NYMEX") and the Commodity Exchange, Inc. ("COMEX"). The CME Group Exchanges offer the widest range of benchmark products available across all major asset classes, including futures and options on futures based on interest rates, equity indexes, foreign exchange, energy, metals, agricultural commodities, and alternative investment products. The CME Group Exchanges serve the hedging, risk management and trading needs of our global customer base by facilitating transactions through the CME Globex® electronic trading platform, our open outcry trading facilities in New York and Chicago, as well as through privately negotiated CME ClearPort transactions.

The equity index futures contracts traded on CME Group designated contract markets provide an essential risk management function, allowing investors to hedge their exposure against a portfolio of shares or equity options. The most significant equity index futures contract traded on the CME Group Exchanges is the E-mini S&P 500 futures contract. In 2009, average daily volume for the E-mini S&P 500 futures contract was 2,207,596 contracts.

I. Introduction

Over the past four days, CME Group has engaged in a detailed analysis regarding trading activity in its markets on Thursday, May 6, 2010. Our preliminary review indicates that our markets functioned properly. We have identified no trading activity that appeared to be erroneous or contributed to the break in the cash equity market during this period. Moreover, no market participant in our markets reported that trades were executed in error nor did the CME Exchanges cancel ("bust") or re-price any transactions as a result of the activity on May 6th.

In the following sections, we discuss: (1) the functioning of our markets on May 6, 2010, (2) the market dynamics in the futures market vis a vis the equity market, and (3) the relevant applicable CME and NYSE circuit breaker rules and (4) CME electronic functionality, particularly CME stop price logic functionality and price banding, among others, which serve to protect our markets. Finally, we have also included preliminary recommendations as to changes that could avoid a recurrence of this type of event in the future.

II. The CME Markets Functioned Properly on May 6, 2010

a. CME Has Conducted an Initial Review of Detailed Trading Records

CME Group analyzed trading volume and activity throughout May 6 and focused particularly on the activity taking place during the period of 1pm to 2pm Central Time. Total volume in the June E-mini S&P futures on May 6th was 5.7 million contracts, with approximately 1.6 million or 28% transacted during the period from 1pm to 2pm Central Time. During that hour, the market traded in a range of 1143.75 to 1056, or 87.75 points - beginning the hour at approximately 1142 and ending the hour at approximately 1113. More than 250 firms and 9,000 User IDs were active in the market during this period of time.

During most of that hour, the bid/ask spread was a tick wide (.25 points) and the market traded in a largely orderly manner despite the significant sell off and subsequent rally. At approximately 1:45:28, following a sharp 12.75 point decline over a period of approximately 500 milliseconds on the sale of 1100 contracts by multiple market participants, the bid/ask spread momentarily widened to 6.5 points or 26 ticks.

At that point, one of CME Globex's risk management functionalities, a CME Globex Stop Price Logic event, which is discussed in more detail below, was triggered. As a result, the market was automatically paused for five seconds to allow liquidity to come into the market. The market subsequently reopened and was 1056.50 bid, at 1056.75 offered, and thereafter rallied more than 40 points to 1097 in the following three minutes.

The Market Regulation Department reviewed a significant amount of activity during this period, a period that included more than 3 million system messages, and, in particular, reviewed the activity of entities whose trading activity during the one-hour period was significant and thus warranted further review. Market Regulation staff ultimately concluded that there were no anomalies represented by the level of activity or the trading strategies employed by market participants.

b. CME Markets Provided an Important Price Discovery and Risk Transfer Function on May 6

From a broader perspective, the cumulative record of May 6 trading activity underscores the fact that CME's futures markets, due to their high level of liquidity, provided an important price discovery and risk transfer mechanism for all market participants on that day.

The second-by-second trading range, which is an indicator of the liquidity in the market, shows that futures had much tighter bid-ask spreads than the comparable Exchange Traded Fund or ETF. The ETF which is most comparable to the E-mini S&P 500 futures is the SPDR S&P 500 ETF Trust (SPY). This demonstrates that, while all the markets were less liquid than in normal times, the liquidity in the futures market degraded much less than in the ETF markets (which, in turn, degraded much less than the individual stocks, especially stocks that are thinly traded.)

There is strong evidence that the futures market (E-mini S&P in particular) was much more liquid than the fragmented underlying stock market on May 6. During the period between 13:40 and 14:00, the volume of E-mini S&P (notionally adjusted) was 3 to 4 times greater than the SPY volume and, at the peak of the market's volatility, was to 8 to 10 times greater.

The data does show that the E-mini S&P futures reached its low prior to the stock market reaching its lows. This is consistent with the role of the futures market in anticipating market movements. Futures contracts, by design, provide an indication of the market's view of the value of the underlying stock index. Casual observation may lead to the conclusion that the E-mini S&P futures prices appeared to lead the decline in the cash market. The chart, attached as Exhibit A, illustrates the comparative value of the E-mini, traded on the futures market, as compared to the equities markets. The chart demonstrates that while the E-mini S&P moved virtually in tandem with the comparable cash instrument until the moment when our Stop Price Logic was implemented which caused our matching engine to pause for 5 seconds. At the time the Stop Price Logic was implemented, the E-mini S&P ceased its drop, while the cash market continued its steep decline. The E-mini S&P then rallied significantly for the remainder of the trading session. We believe this recovery was positively influenced by our Stop Price Logic functionality which stabilized market activity. This functionality is not available in the securities market. Consequently, while the broad based index markets – SPYs and CME E-mini S&P – were substantially recovering, there were continued price declines in individual stocks which persisted for minutes (not seconds).

If a seller made a decision to sell a large position, it was rational for that seller to turn to the most liquid market, notably the E-mini S&P futures contract, where there is significant market participant confidence. A review of the composition of the trading volume confirms that this was the case. Consequently, equity index futures perform an important price discovery function in the market. If the futures market had not been available as an alternative, the selling would have manifested itself somewhere else, potentially in a less liquid market, such as the underlying stock market or the OTC derivatives market. The relative tightness of the spread in the futures market underscores the fact that there were buyers in the market as well creating a concentration of liquidity that further supported the important price discovery and risk transfer role of the futures market. (Click to view additional data illustrating CME markets' price discovery and risk transfer function, comparing Accenture, Procter & Gamble and 3M Company stock .)

III. Circuit Breaker Rules

One of the mechanisms that exchanges have implemented to curb market volatility are "circuit breaker" rules. Circuit breaker rules require an automatic halt in trading when pre-determined price levels are reached. CME Group Exchanges currently have circuit breaker rules in effect for

equity index products which are consistent with the circuit breaker rules in the underlying equity markets. The following is a brief history and summary of circuit breaker rules as developed by the equities markets and by CME.

Circuit breaker rules were originally introduced following the September 1987 market crash. The circuit breakers were implemented uniformly across all equities and options exchanges and were set at a fixed price level tied to the DJIA. If the DJIA declined 250 points (approximately 12% of the Index) from the prior day's close, a trading halt was imposed; if the DJIA declined 400 points, a subsequent two-hour trading halt was triggered. This rule was embodied in NYSE Rule 80B.

On October 27, 1997, the circuit breakers were triggered for the first time. A subsequent analysis of those events let to a modification of the circuit breaker rules to employ percentage declines of 10, 20 and 30% in the DJIA in lieu of the fixed point triggers previously used. That rule remains in effect.

The CME also adopted price limit rules for its equity index contracts. These price limits were coordinated with the NYSE Rule 80B trading halts when the latter were adopted in 1988. The price limit structure and levels have changed several times as the Exchange has gained more experience and as the trading halts in the equity market have been modified.

CMEs rules originally included several intermediate price limits -- called "speed bumps" – triggered prior to a trading halt, which were in effect for ten-minute intervals. CME also imposed total daily limits on its domestic equity futures contracts, set at approximately a ten percent drop in the respective index.

In 1998, when the circuit breaker rules at NYSE and the other equity exchanges were changed to the 10, 20 and 30% level, CME adopted a price limit system of 2.5, 5, 7.5 and 10% limits, with a total daily limit of 20%. Later in 1998, CME adopted a 15% speed bump which triggered a 10 minute reserve period in the market. In 2001, CME amended the price limits to eliminate the 2.5% limit on all domestic stock indexes. The limits were triggered at 5, 10, 15 and 20%.

In January 2008, the decision was made to harmonize CMEs limits to be fully consistent with the NYSE Rule 80B (and also consistent with the methodology employed by the CBOT with respect to the DJIA futures). Consequently, the 5%, 7.5%, 10%, 15% and 20% limits were eliminated in favor of the 10%, 20% and 30% employed by the NYSE. CME did, however, retain the references to the specific stock index that is the subject of the futures contract rather than tying these limits to movements in the DJIA, meaning, for example, that the E-mini S&P 500 circuit breakers are tied to price movements in the related index.

CME implements an unconditional futures trading halt in the equity index futures when the primary stock market is halted, regardless of whether a particular index product has hit a limit or not. CME also continued enforcement of 5% limit bid or offer policy during overnight electronic trading hours; if equity index futures are locked limited at 8:15 a.m. Central Time ("CT") and remain so at 8:25 a.m. CT in the lead month futures contract, there will be a trading halt in effect until the commencement of regular trading hours (floor and electronic trading). During the trading halt, the Exchange will provide an Indicative Opening Price of the re-opening of trading on CME Globex, if applicable. If the lead month futures contract is no longer locked limit at

8:25 a.m. CT, trading will continue with the 5 percent limit in effect. At 8:30 a.m. CT, the 5 percent overnight electronic trading hours limit no longer will be applicable.

On May 6th, the declines in the DJIA were just short of 10% at a time of day when the 20% trigger was in effect. Consequently, the circuit breakers in the primary and the futures markets were not triggered.

IV. CME Has Risk Management Controls to Mitigate the Potential for Disruption of its Markets

In addition to the circuit breaker rules described above, CME has in place numerous risk management processes, procedures and systems to preserve the integrity of its market in light of the many risks associated with maintaining a primarily electronic market. For example, CME is the only exchange in the world that requires pre-execution credit controls. Appended to the testimony as Exhibit B is a detailed list and description of the multitude of controls that the CME employs on its CME Globex system, including credit controls, messaging volume controls and risk protection policies and procedures.

There are certain risk protection tools employed by the CME which are important to note individually and which are relevant to today's discussion. One of these tools, CME Globex Stop Price Logic functionality, was employed on May 6 – its operation and effect are also described below.

a. Stop Price Logic Functionality

The CME Globex system has a Stop Price Logic functionality which serves to mitigate artificial market spikes that can occur because of the continuous triggering, election and trading of stop orders due to insufficient liquidity. If elected stop orders would result in execution prices that exceed pre-defined thresholds, the market automatically enters a brief reserved state for a predetermined time period, generally ranging from 5 – 10 seconds. During this period, no orders are matched and new orders other than market orders may be entered and orders may be modified and cancelled. The momentary pause that occurs when stop price logic is triggered allows market participants the opportunity to provide liquidity and allows the market to regain equilibrium, thereby mitigating the potential for disruptive market moves.

The stop spike price and time parameters in the E-mini S&P futures are 6 index points and 5 seconds, respectively.

The Stop Price Logic was triggered on May 6th in the E-mini S&P 500 equity index. At 1:45:27, one second prior to going into reserve state, the front month E-mini S&P 500 equity index futures contract was trading just under the 1070.00 level. Multiple parties entered the market selling and taking the market down to 1062.00. There was a stop order to sell 150 contracts at 1062.00 which moved the markets to 1058.25. This trade triggered another 150 lot stop at 1059.00 which sold the market down to 1056.00. At this time renewed buying from multiple firms absorbed the volume at which point, the market started to trade off of the lows.

The front month E-mini S&P 500 equity index futures market went into reserve state as a result of stop price logic functionality being triggered at 13:45:28. The market came out of this reserve state five seconds later. As a result of the stop, the decline in the E-minis halted and the market came out of the reserve state with an initial price of 1056.75.

b. Price Banding Functionality

To ensure fair, stable and orderly markets, CME Globex subjects all orders to price verification using a process called price banding. The platform utilizes separate mechanisms for futures price banding and options price banding. Price banding prevents the entry of erroneous orders such as a limit bid at a price well above the market or a limit offer at prices well below the market which could trigger a sequence of market-moving trades that require subsequent cancellations.

c. Protection Points for Market and Stop orders

This CME Globex functionality automatically assigns a limit price (Protection Point) to futures market orders and stop orders to preclude the execution of these types of orders at extreme prices in situations where there is insufficient liquidity to support the execution of the order within an exchange-specified parameter of the current market.

The Protection Point values vary by product, and in the E-Mini S&P futures the Protection Point is established at 3 index points. The CME Globex system calculates the limit price for a Market Protected Order by applying the Protection Point value to the best bid or offer price (depending on the order's side of market) and by applying the Protection Point value to the trigger price for a Stop Protected Order. Any unmatched quantity remaining for a Market Protected or Stop Protected Order after it is executed to the Protection Point limit becomes a Limit Order at the limit price.

d. Maximum Order Size Protection

This CME Globex functionality prohibits entry of an order into the trading engine which exceeds a pre-determined quantity. For E-mini S&P 500 futures, the order size is 2,000 contracts. This functionality provides protection against the so-called "fat finger" trades. Additional credit controls serve as a check to ensure that a single market participant is not sending in continuous orders at the maximum order size if such trading cannot be supported.

V. High Frequency Trading

An important issue raised in this discussion is the contribution of high frequency traders ("HFTs") to the current situation and their future role in the markets. As recently described in the SEC's Concept release on market structure, high frequency trading was identified as one of the most significant market structure developments in recent years. Although HFT is not clearly defined, "it typically is used to refer to professional traders acting in a proprietary capacity that engage in strategies that generate a large number of trades on a daily basis."

CME believes that HFTs play an important role in the markets, particularly when such activities are engaged in with the types of risk management procedures detailed in the previous section. HFTs are an important part of daily trading activity in the marketplace and this has developed in response to technological and trading strategy advances. This represents the natural evolution of technological advancements and improvements in the marketplace and the percentage of trading volume attributable to HFTs will likely continue to increase in the future. There is evidence that HFTs increase liquidity and transparency in the marketplace and narrow spreads which allows investors to buy and sell securities at better prices and at lower costs.

It is also important to note that not all HFTs are alike. A significant proportion of HFTs on the CME promote liquidity by providing continuous markets in our products. As illustrated by the events of May 6, in analyzing the role of one HFT, a majority of that entity's trading executed during the relevant one-hour period was related to that firm's market making activities. Thus, before considering restrictions on HFT activity, consideration should be given to the beneficial role played by HFTs in providing liquidity during normal market activity as well as during times of increased market turmoil.

The use of high frequency trading by proprietary trading firms, investment banks, hedge funds and index traders, among others, has made the marketplace more efficient and competitive for all market participants. Any attempt to place significant restrictions or limitations on HFTs would be harmful to the marketplace and result in less efficient and less liquid markets. It is also important to note that automated trading or algorithmic trading has its origins in Europe. Accordingly, efforts to place limits or impose regulatory burdens on HFTs in the United States may encourage HFTs to shift the trading they currently conduct in the United States to Europe and other foreign jurisdictions that are already well-equipped to handle additional growth in both equities and futures.

CME Globex employs many risk management policies and procedures which assist in the mitigation of risk associated with any type of electronic trading, including that of HFTs. In addition, the CME Group Exchanges are proactive in monitoring the trading activity of HFT entities. All Automated Trading Systems ("ATS") using CME Globex are required to identify themselves as an "ATS" and register with the CME Group Exchanges. Subsequent to their registration, the CME Group Exchanges are able to monitor the trading activity of ATSs on both a real time and post-trade basis. CME has required ATS registration for its equity index products since 2006. This policy has now been expanded to ATS' for all products and we currently have over 10,000 ATS registered.

VI. Preliminary Recommendations

As noted previously, CME has endeavored to extensively examine the activity in our markets on May 6, 2010. Based on our analysis to date, we would make the following preliminary recommendations regarding potential changes to improve the functioning of the markets during times of severe turmoil. Of course, as we continue to study the situation, we would be happy to contribute our further thoughts and recommendations.

- Circuit breakers, including circuit breakers for individual stocks such as that implemented by the NYSE, must be harmonized across markets. The lack of consistency exacerbated the decline in certain individual stocks as the NYSE exercised its Liquidity Replenishment Rule to slow down its markets and orders were then directed to less liquid electronic trading venues.

- Stop price logic functionality should be adopted across markets, on a product by product basis, to prevent cascading downward market movements.

- The current circuit breaker levels of 10, 20 and 30 percent, the duration of the halt and the time of day at which such triggers are applicable, should be reevaluated in light of current market conditions to determine whether any changes are warranted. Any such changes must be implemented across all market venues.

Exhibit A

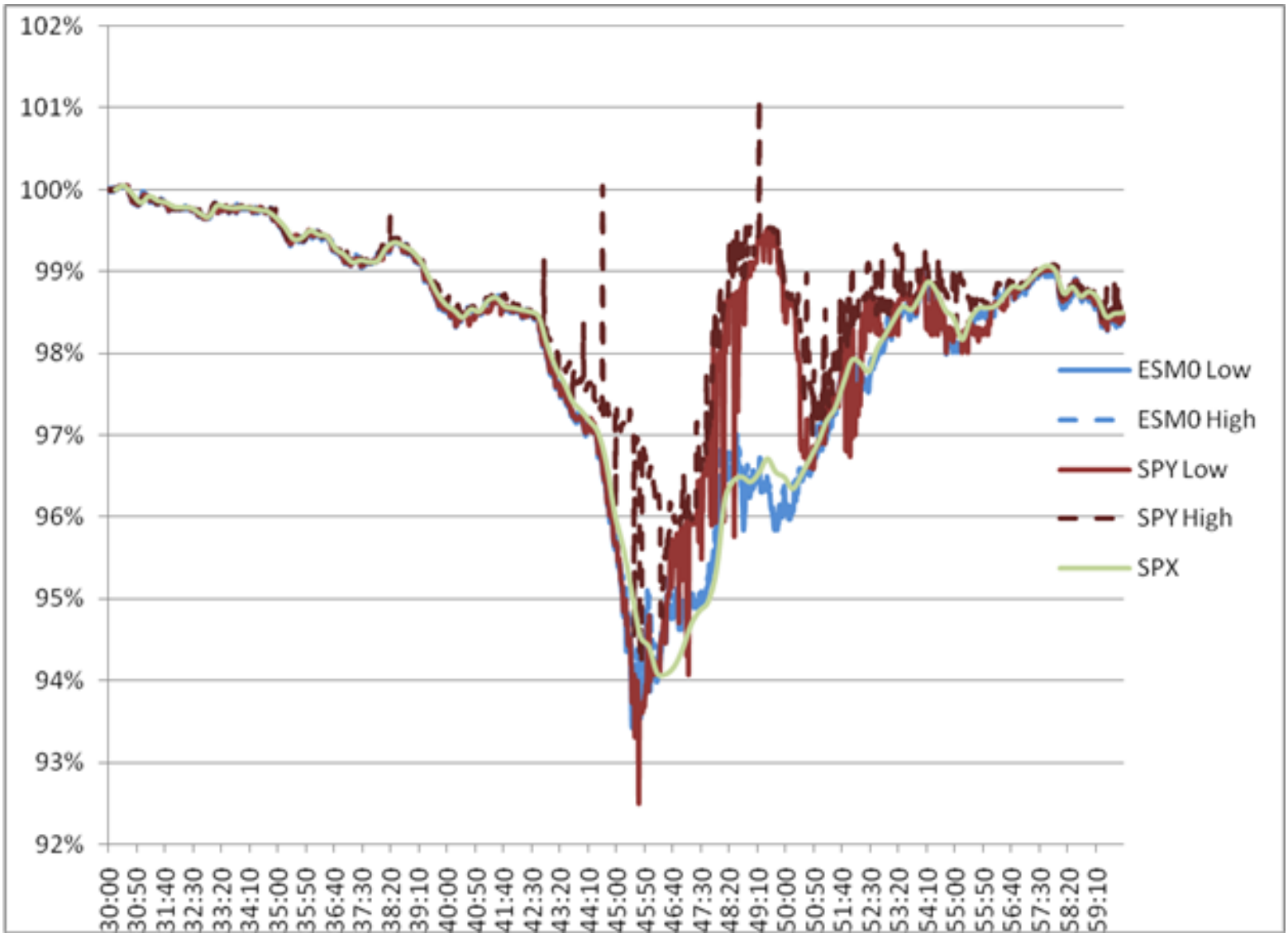

Exhibit B


101%
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99%
98%
97%
96%
95%
94%
93%
All trades of ACN were busted during this period.
High price was below 40% of pre-panic period
ACN was very thinly traded
during this period.
ESM0 Low
ESM0 High
ACN Low
ACN High
SPX
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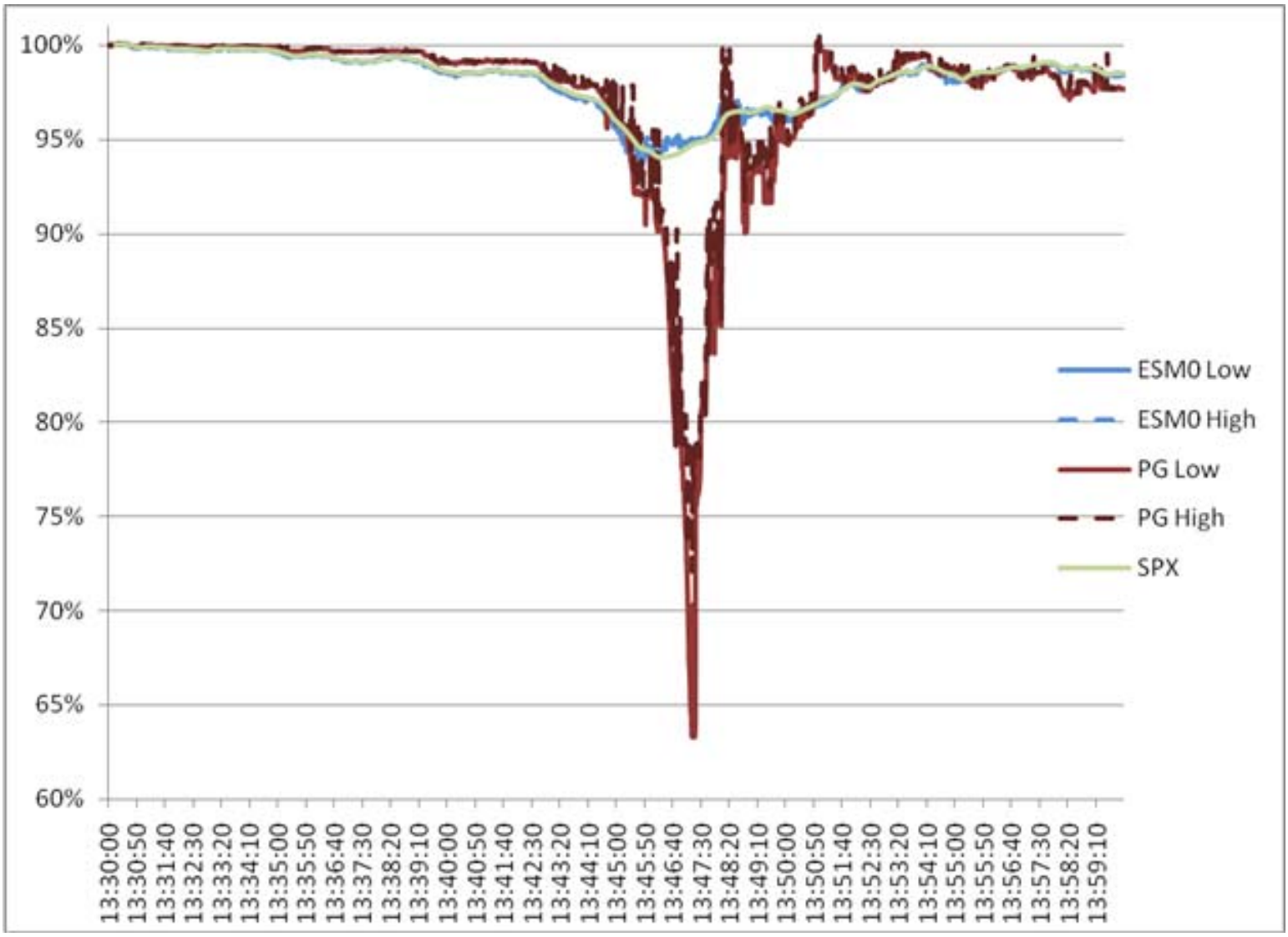
Exhibit C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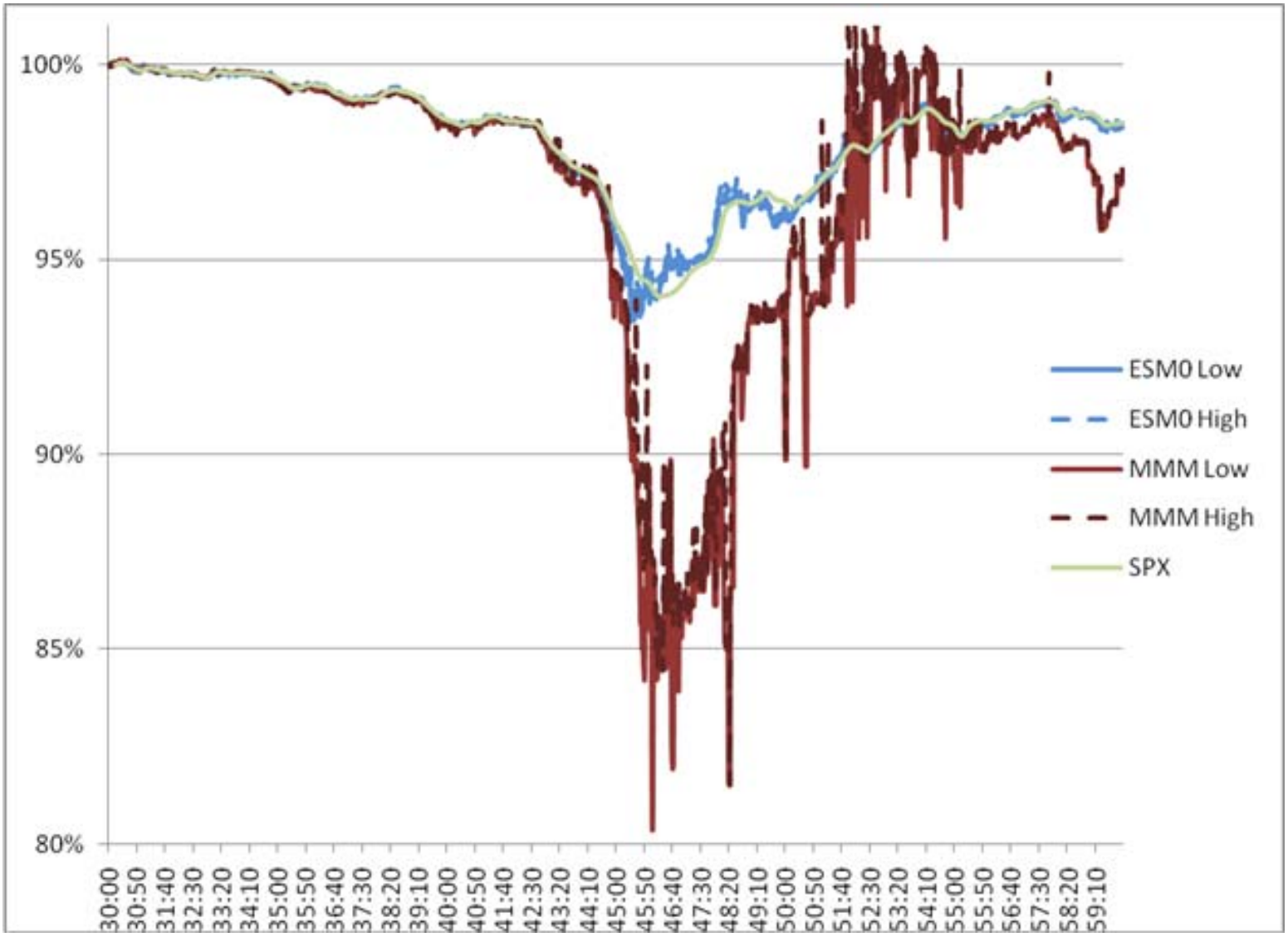
ESM0 Low
ESM0 High
PG Low
PG High
SPX

Exhibit D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ESM0 High
MMM Low
MMM High
SPX