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Behind the Collapse of MF Global

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MF Global was the largest broker at many of the world's commodity exchanges. But on Halloween Day—Oct. 31—in 2011, the company filed for bankruptcy in what became the eighth-largest business failure in U.S. history. More important, as much as $1.6 billion was missing from customer accounts, despite longstanding safeguards designed to protect the funds of brokerage firm customers. As the bankruptcy process draws to a close, this paper reviews the events leading to MF Global's collapse, steps taken to recover the missing funds, and proposals to better protect customers from the misuse of their funds.

The Futures Brokerage Business and Segregated Funds

In simplest terms, brokerage is the buying and selling of futures contracts on behalf of customers. Futures brokerage tends to have thin profit margins, so there is a strong emphasis on controlling costs and minimizing errors. It also has economies of scale that encourage the acquisition of other firms so costs can be spread over larger numbers of customers and transactions. Revenues are derived primarily from fees charged for executing customer orders and related services, and from investing excess funds deposited by customers.

Customers are required to post margin—often described as a good-faith deposit—when buying or selling a futures contract. The Commodity Futures Trading Commission (CFTC) is the federal regulator of the futures markets, and CFTC Regulation 1.20 requires all customer funds to be segregated from the brokerage firm's operating capital to prevent a brokerage firm from diverting customer funds for its own use.

Segregated funds for all customers may be combined and held in a single account, but the funds for each customer must be accounted for separately. This is typically accomplished by assigning each customer a sub-account within the combined account. The name on the combined account must clearly identify it as containing customer funds to prevent these segregated funds from accidentally being used for other purposes. Brokerage firms routinely keep some company funds in one or more sub-accounts within the combined segregated funds account. These brokerage firm funds are used to provide an additional cushion against temporary customer shortfalls, meet various regulatory requirements, and fund various "house" trading accounts used for the firm's own trading activities.

When a futures contract is bought or sold, profits are credited and losses are debited to the customer's sub-account at the end of each trading day. If a customer's balance drops below a certain level, the customer receives a margin call and must immediately deposit additional funds. Because this balance fluctuates each day with futures price movements, most customers prefer to maintain excess funds in their margin accounts. The brokerage firm is allowed to invest these excess customer funds and keep the proceeds. However, CFTC Regulation 1.25 imposes strict limits on the types of interest-bearing financial instruments in which these funds may be placed—primarily U.S. government securities, U.S. agency obligations, certificates of deposit (CDs) issued by Federal Deposit Insurance Corporation (FDIC)-insured banks, and other ultra-safe investments.

Brokerage is a highly competitive business and brokerage firms, like other businesses, fail and go out of business from time to time. However, the U.S. Bankruptcy Code grants special treatment to segregated customer funds in the event of a brokerage firm bankruptcy. When a bankruptcy occurs, all customer sub-accounts—containing futures contracts, cash, and any other assets—are transferred in their entirety to one or more other brokerage firms. These transfers normally are completed within one or two days, similar to the process used when a local bank is acquired by another financial institution. Once all customer accounts have been transferred, any remaining assets of the bankrupt brokerage firm, including the sub-accounts containing company-owned funds, are liquidated and divided among the creditors through the bankruptcy process.

The Rise and Fall of MF Global

MF Global began as a British sugar trading firm founded in 1783. The firm continued to focus on trading and transporting physical commodities until the 1980s, when it diversified into financial services and expanded rapidly. Much of this growth was fueled by the acquisition of several U.S. futures brokerage firms including Refco, which itself had collapsed in 2005. These acquisitions provided MF Global with a large customer base of farmers, agribusinesses, and other users of the agricultural futures markets. In 2007 these brokerage operations were spun off as a separate company and renamed MF Global.

Troubled Beginnings

From the time it became an independent company in 2007, MF Global struggled to attract capital and maintain profitability. The economic downturn led to a steep drop in trading volume, causing MF Global's brokerage revenues to fall by 32%. At the same time, the Federal Reserve's so-called zero interest rate policy caused MF Global's returns from the investment of excess customer funds to plunge by 87%. With these two important income streams reduced to a trickle, MF Global reported net losses for fiscal years 2008, 2009, and 2010.

MF Global also suffered damage from a "rogue trader" episode in February 2008. An employee in MF Global's Memphis office sold more than 16,000 wheat futures contracts—representing 80 million bushels—one night from a home computer linked to the company's order entry system. The employee placed these trades, which exceeded both his personal trading limit and CFTC regulations, in the hope that wheat prices would move lower and he could profit by buying back these contracts at a lower price. Instead, wheat prices moved higher and MF Global was responsible for covering the $141 million trading loss plus a $10 million fine from the CFTC for this and other regulatory lapses.

MF Global hired Jon Corzine as chairman and chief executive officer in March 2010 as part of a corporate turnaround effort. Corzine was highly regarded, having served five years in the U.S. Senate and four years as governor of New Jersey after retiring as chairman of Goldman Sachs. Upon taking control, Corzine announced plans to transform MF Global from a trading volume- and interest rate-dependent brokerage business into a full-service global investment bank. According to Corzine, providing the full spectrum of investment services would allow MF Global to diversify its sources of income and move into specialized financial areas with higher profit margins. In addition, MF Global would engage in proprietary trading—buying and selling investments using its own funds—as a way to generate additional profits.

Repos on Distressed European Debt

The European debt situation was deteriorating rapidly in 2010. However, Corzine and others at MF Global felt that bonds issued by the governments of Ireland, Italy, Portugal, and Spain had been oversold and, therefore, were underpriced. Buying these distressed bonds, which were selling at steeply discounted prices, and holding them to maturity in either 2011 or 2012—at which time the issuing countries hopefully would redeem them at full value—would give MF Global a huge profit. In addition, MF Global would collect the interest payments on these bonds as long as the issuing countries did not default. However, simply buying these bonds and holding them to maturity meant that MF Global would not realize a profit for one or two years. Furthermore, MF Global's earnings would be at risk to any further decline in the bonds' values until the bonds reached maturity.

To get around these problems, MF Global bought distressed European bonds and used them as collateral in a variation of a repurchase agreement known as a repurchase-to-maturity (RTM). In a repurchase agreement, Company A agrees to sell a security to Company B at a discount from fair market value; Company A also agrees to repurchase the security from Company B at some later date at an agreed-upon price, hence the name repurchase agreement, or "repo," for short. The difference between the discounted value at the beginning and the agreed-upon price at the end represents an interest payment from Company A to Company B. Therefore, a repo is much like a secured loan in which Company A is the borrower, Company B is the lender, and the security serves as the collateral on the loan.

The initial discount from fair market value—the "haircut"—protects the lender against a decline in the value of the collateral or a change in the creditworthiness of the borrower. If the value of the collateral declines or the credit rating of the borrower is reduced at any time over the life of the repurchase agreement, the lender has the right to demand a bigger haircut from the borrower in the form of a cash payment called a margin call. While a margin call for a repurchase agreement is not the same as a margin call for a futures contract, both of them involve an immediate cash payment and are triggered by an unfavorable market change.

An RTM is similar to a standard repo, except that the lender can either return the collateral to the borrower at the end of the agreement or redeem it from the issuer at par value. Because the lender can redeem the collateral from the issuer, financial accounting standards require the borrower to report the first part of the RTM transaction as a sale. For MF Global, this meant the distressed European debt would not appear on its balance sheet, a point that became increasingly important as conditions in Europe deteriorated. In addition, if the interest payment received on the bonds exceeded the haircut paid to the lender, MF Global could record an immediate profit on the trade. MF Global's leaders were hungry for positive results and embraced RTMs as the answer to the company's problems. By August 2011, MF Global's RTM position had ballooned to $7.4 billion and accounted for nearly one-seventh of the firm's assets, compared to virtually zero a year before.

Margin Calls, Credit Downgrades and a Run on the Bank

The success of this RTM strategy rested on two important requirements: that the European debt crisis would not worsen, and that MF Global would maintain a stable credit rating. Instead, the European debt situation steadily worsened and bond prices continued to decrease, leading to margin calls from the lenders in the RTM trades. These margin calls were a major factor in the record $191.6 million loss reported by MF Global for the fiscal quarter ending September 2011. This loss led to a downgrade of the company's credit rating to the lowest level eligible for investment grade, and set off another wave of margin calls on the RTM trades.

The downward spiral accelerated during the last week of October. Further downgrades left MF Global's credit rating at "junk" or speculative grade, indicating a company at risk of default, and triggered a new round of margin calls. Amid growing concerns about the company's viability, MF Global experienced the brokerage firm equivalent of a "run on the bank": customers withdrew funds or closed accounts altogether, lenders cancelled credit lines, firms stopped trading with MF Global, and counterparties slowed or withheld payments to MF Global.

The Final Days

The resulting liquidity crunch forced MF Global to scramble for cash to meet its day-to-day funding needs. On several occasions during the final week of October, cash was withdrawn from what were believed to be excess company funds held in the segregated funds account. The company also began the questionable practice of making intra-day borrowings from the customer portion of the segregated funds account, transferring funds out in the morning and returning them by the end of the trading day when the final balances were determined for regulatory purposes.

As MF Global's cash needs grew and its ability to repay these temporary borrowings declined, it eventually reached the point where it was unable to return the customer funds it had borrowed. On Friday, Oct. 28, MF Global discovered a $300 million shortfall in customer segregated funds. MF Global staff, regulators, and exchanges worked around the clock through the weekend to resolve this discrepancy, but as time passed the shortfall grew larger. By early Monday morning, the amount of missing segregated funds had reached $900 million for customers trading on U.S. exchanges, plus an additional $700 million for customers trading on foreign exchanges. With no way out, MF Global and its subsidiaries filed for bankruptcy. The bankruptcy trustee later found that the deficit in customer segregated funds had existed at least since Wednesday, Oct. 26, but MF Global's books and records were such a shambles and its internal financial controls were so weak that the shortfall went undetected.

The MF Global Bankruptcy Process

The first action of the bankruptcy trustee was to transfer customer accounts to other brokerage firms. But because segregated funds were missing, the normal account-by-account transfer of commodity positions and associated customer funds could not occur. Futures positions were transferred to six other brokerage firms, but the corresponding cash balances were frozen pending resolution of the shortfall. As a result, customers immediately received margin calls from their new brokerage firms on what suddenly became un-margined positions. Those customers who were unable to immediately make new margin deposits on their existing futures positions saw those positions liquidated. In many cases, these liquidations wiped out the risk management strategies put in place by farmers and agribusinesses.

The bankruptcy trustee also established a claims process with four classes: 4d Customers, 30.7 Customers, Delivery Customers, and Securities Customers. Of the four, the Securities Customers class was the easiest to resolve because there were only 428 securities customers at MF Global and all were covered by the Security Investors Protection

Corporation (SIPC). SIPC was created by Congress in 1970 in response to a series of securities firm failures. SIPC holds a $1-billion reserve that has accumulated over the years from assessments on brokerage firms at a rate of ¼ of 1% per year of net operating revenues from securities. It pays up to $500,000 per customer for missing securities, including a maximum of $250,000 for missing cash, and is designed to reimburse customers promptly for any losses resulting from a brokerage firm failure due to reasons other than fraud. As a result, Securities Customers were made whole within a matter of weeks.

The 27,000-plus customers in the three commodities classes have not been so fortunate. Delivery Customers—owners of physical commodities and related assets used in futures deliveries—received a complete return of property following court approval in April 2012, six months after the event. The 4d Customers—named after the section of the Commodity Exchange Act that applies to customers of domestic exchanges—have received $4.8 billion from the bankruptcy process as of June 2013, representing 89% of their segregated funds. Payouts from two recent legal settlements are expected to bring the final figure to 96%, leaving 4d Customers as a group with a $205 million shortfall. Most farmers and agribusinesses are part of the 4d customer class.

The 30.7 Customers—named after the section of the CFTC Regulations covering domestic customers of foreign exchanges—have fared even less well. They have received just $158 million from the bankruptcy process as of June 2013, representing 18% of their segregated funds. Payouts from a recent legal settlement are expected to increase this to 60%, and the possibility of additional recoveries could bring the final figure to somewhere between 84% and 91%. Even at these projected levels, 30.7 Customers, as a group, stand to lose at least $80 million, and possibly as much as $140 million.

Why Hasn't Someone Been Put in Jail?

On June 27, 2013, the CFTC filed a civil lawsuit against the MF Global holding company, MF Global's brokerage arm, Jon Corzine, and Edith O'Brien. O'Brien was the assistant treasurer and, in the final days, played a prominent role in transferring funds among various parts of MF Global in an attempt to keep the company afloat. The CFTC suit charges the defendants with four counts, all of which involve violations of various parts of the Commodity Exchange Act and CFTC regulations: 1) Failure to segregate, and misuse of, customer funds; 2) Failure to report under-segregation; 3) Submission of false or misleading statements; and 4) Failure to supervise diligently. Among the punishments requested by CFTC are lifetime bans to prevent Corzine and O'Brien from working or trading in the futures markets, disgorgement of all income made in connection with the violations described in the lawsuit, full restitution to every customer whose funds have not yet been returned, and various other penalties including a record $100 million fine payable to the CFTC.

While this legal action may bring some sense of satisfaction to customers and others, it remains to be seen how much additional money is actually recovered and returned. MF Global's bankruptcy trustee immediately settled with the CFTC and agreed to make distributions to MF Global customers out of the bankruptcy estate. But this process has been underway since November 2011, and nothing will change unless the lawsuit produces some additional money for these customer distributions. Corzine and O'Brien, if found guilty, could be ordered to forfeit some of their personal assets, but it is unlikely these amounts would be enough to make all customers whole. It is even less likely that the CFTC will collect its $100 million fine because the CFTC will be paid only after all customer claims have been satisfied and all other creditors have been paid.

Most observers expect this to be a challenging case for the CFTC and it could take several years to resolve. One point worth noting is that this is a civil case, not a criminal one, because there has been no indication that the missing customer funds were stolen, embezzled, or otherwise misappropriated nor has there been any evidence of criminal intent. Instead, the MF Global saga appears to be a case of mismanagement on a massive scale. As a result, none of the defendants will go to prison, if found guilty, because mismanagement is not a crime.

Restoring Customer Confidence

Many brokerage firms have failed over the years, but MF Global represents the first time that customers have been unable to recover 100% of their segregated funds. Although it is all but certain that the missing funds were used to cover losses on MF Global's RTM trades, it does not remove the fact that between one-quarter and one-third of a billion dollars belonging to MF Global customers remains missing. Before MF Global failed, market participants took it for granted that segregated funds were untouchable and fully protected from any actions of the brokerage firm entrusted with those funds. It is little wonder that even those who were not customers of MF Global have questioned the safety of their funds and the soundness of the current futures industry business model.

A number of solutions have been proposed to better safeguard customer funds held in commodity brokerage accounts. These suggestions include the creation of a SIPC-like fund for the futures industry, boosting the financial and legal obligations of brokerage firms, more thorough auditing of brokerage firms, and requiring that all customer funds be held by exchanges or their clearinghouses, to name just a few. Futures markets play a vital role in risk management and price discovery for many agricultural commodities. Therefore, it will be essential for key stakeholders to work together and find a way to ensure the safety of customer funds without damaging market efficiency or imposing burdensome costs on market participants.

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