DOWNLOAD PDF LONG-TERM CAPITAL MANAGEMENT

Chapter 1 : What is Long-term Capital? definition and meaning

Long-Term Capital Management (LTCM) was a large hedge fund led by Nobel Prize-winning economists and renowned Wall Street traders that nearly collapsed the global financial system in

Because Salomon was the largest bidder on treasury bonds at auction, the Treasury department feared that Salomon would be able to take a strategic position on the bonds in order to influence the price. Though Meriwether was not directly implicated, calls for his ousting rose within the company and he resigned before he was to be let go. With the help of Merrill Lynch, LTCM secured hundreds of millions of dollars from business owners, celebrities and even private university endowments. The bulk of the money, however, came from companies and individuals connected to the financial industry. Government bonds are a "fixed-term debt obligation", meaning that they will pay a fixed amount at a specified time in the future. Unlike differences in share prices of two companies, which could reflect different underlying fundamentals, price differences between a 30 year treasury bond and a 29 and three quarter year old treasury bond should be minimalâ€”both will see a fixed payment roughly 30 years in the future. However, small discrepancies arose between the two bonds because of a difference in liquidity [12]. This led LTCM to undertake more aggressive trading strategies. Although these trading strategies were non-market directional, i. The fund also invested in other derivatives such as equity options. Long Term Capital Management was found to have entered into certain tax avoidance transactions. It makes it just a bit harder for the IRS to link all the deals together. In May and June returns from the fund were This was further aggravated by the exit of Salomon Brothers from the arbitrage business in July Such losses were accentuated through the Russian financial crises in August and September , when the Russian Government defaulted on their government bonds. Panicked investors sold Japanese and European bonds to buy U. The profits that were supposed to occur as the value of these bonds converged became huge losses as the value of the bonds diverged. As a result of these losses, LTCM had to liquidate a number of its positions at a highly unfavorable moment and suffer further losses. A good illustration of the consequences of these forced liquidations is given by Lowenstein This may have happened in the long run, but due to its losses on other positions, LTCM had to unwind its position in Royal Dutch Shell. Lowenstein reports that the premium of Royal Dutch had increased to about 22 percent, which implies that LTCM incurred a large loss on this arbitrage strategy. The contributions from the various institutions were as follows:

Chapter 2 : Long-Term Capital Management Applicable to Today's Market

Long-Term Capital Management L.P. (LTCM) was a hedge fund management firm based in Greenwich, Connecticut that used absolute-return trading strategies combined with high financial leverage.

Scholes left and Robert C. Merton were principals at LTCM. Scholes and Robert C. With the help of Merrill Lynch, LTCM secured hundreds of millions of dollars from business owners, celebrities and even private university endowments and later the Italian central bank. The bulk of the money, however, came from companies and individuals connected to the financial industry. Since bonds of similar maturities and the same credit quality are close substitutes for investors, there tends to be a close relationship between their prices and yields. Whereas it is possible to construct a single set of valuation curves for derivative instruments based on LIBOR-type fixings, it is not possible to do so for government bond securities because every bond has slightly different characteristics. It is therefore necessary to construct a theoretical model of what the relationships between different but closely related fixed income securities should be. For example, the most recently issued treasury bond in the US â€" known as the benchmark â€" will be more liquid than bonds of similar but slightly shorter maturity that were issued previously. Trading is concentrated in the benchmark bond, and transaction costs are lower for buying or selling it. As a consequence, it tends to trade more expensively than less liquid older bonds, but this expensiveness or richness tends to have a limited duration, because after a certain time there will be a new benchmark, and trading will shift to this security newly issued by the Treasury. One core trade in the LTCM strategies was to purchase the old benchmark â€" now a Over time the valuations of the two bonds would tend to converge as the richness of the benchmark faded once a new benchmark was issued. If the coupons of the two bonds were similar, then this trade would create an exposure to changes in the shape of the yield curve: It would therefore tend to create losses by making the year bond that LTCM was short more expensive and the This exposure to the shape of the yield curve could be managed at a portfolio level, and hedged out by entering a smaller steepener in other similar securities. It was also necessary to access the financing market in order to borrow the securities that they had sold short. In order to maintain their portfolio, LTCM was therefore dependent on the willingness of its counterparties in the government bond repo market to continue to finance their portfolio. If the company was unable to extend its financing agreements, then it would be forced to sell the securities it owned and to buy back the securities it was short at market prices, regardless of whether these were favourable from a valuation perspective. The fund also invested in other derivatives such as equity options. UBS Investment[edit] Under prevailing US tax laws, there was a different treatment of long-term capital gains, which were taxed at The earnings for partners in a hedge fund was taxed at the higher rate applying to income, and LTCM applied its financial engineering expertise to legally transform income into capital gains. It did so by engaging in a transaction with UBS Union Bank of Switzerland that would defer foreign interest income for seven years, thereby being able to earn the more favourable capital gains treatment. This transaction was completed in three tranches: Put-call parity means that being short a call and long the same amount of notional as underlying the call is equivalent to being short a put. James Surowiecki concludes that LTCM grew such a large portion of such illiquid markets that there was no diversity in buyers in them, or no buyers at all, so the wisdom of the market did not function and it was impossible to determine a price for its assets such as Danish bonds in September It also broadened its strategies to include new approaches in markets outside of fixed income: Treasuries at constant maturity. Since position sizes had not been reduced, the net effect was to raise the leverage of the fund. Although this crisis had originated in Asia, its effects were not confined to that region. The rise in risk aversion had raised concerns amongst investors regarding all markets heavily dependent on international capital flows, and this shaped asset pricing in markets outside Asia too. This was further aggravated by the exit of Salomon Brothers from the arbitrage business in July One LTCM partner commented that because there was a clear temporary reason to explain the widening of arbitrage spreads, at the time it gave them more conviction that these trades would eventually return to fair value as they did, but not without widening much further first. Such losses were accentuated through the Russian financial crisis in August and September , when the Russian government defaulted on its domestic local currency bonds. There was a flight to quality, bidding up the prices of the most liquid and benchmark securities that LTCM was short, and depressing the price of the less liquid securities it owned. This phenomenon occurred not merely in the US Treasury market but across the full spectrum of financial assets. Although LTCM was diversified, the nature of its strategy implied an exposure to a latent factor risk of the price of liquidity across markets. As a consequence, when a much larger flight to liquidity occurred than had been anticipated when constructing its portfolio, its positions designed to profit from convergence to fair value incurred large losses as expensive but liquid securities became more expensive, and cheap but illiquid securities became cheaper. Because LTCM was not the only fund pursuing such a strategy, and because the proprietary trading desks of the banks also held some similar trades, the divergence from fair value was made worse as these other positions were also liquidated. Victor Haghani, a partner at LTCM, said about this time "it was as if there was someone out there with our exact portfolio, A vivid illustration of the consequences of these forced liquidations is given by Lowenstein This might have happened in the long run, but due to its losses on other positions, LTCM had to unwind its position in Royal Dutch Shell. After LTCM failed to raise more money on its own, it became clear it was running out of options. Warren Buffett gave Meriwether less than one hour to accept the deal; the time lapsed before a deal could be worked out.

Chapter 3 : Long-Term Capital Management (LTCM)

The demise of the firm, Long-Term Capital Management (LTCM), was swift and sudden. In less than one year, LTCM had lost $ billion of its $ billion in capital.

Though a city landmark building constructed in , the bank is a muted, almost unseen presence among its lively, entrepreneurial neighbors. The area is dotted with discount stores and luncheonettes-and, almost everywhere, brokerage firms and banks. Morgan is a few blocks away. The bank skyscrapers project an open, accommodative air, but the Fed building, a Florentine Renaissance showpiece, is distinctly forbidding. Its arched windows are encased in metal grille, and its main entrance, on Liberty Street, is guarded by a row of black cast-iron sentries. The New York Fed is only a spoke, though the most important spoke, in the U. McDonough especially wants to hear about anything that might upset markets or, in the extreme, the financial system. But McDonough tries to stay in the background. The Fed has always been a controversial regulator-a servant of the people that is elbow to elbow with Wall Street, a cloistered agency amid the democratic chaos of markets. For McDonough to intervene, even in a small way, would take a crisis, perhaps a war. And in the first days of the autumn of , McDonough did intervene-and not in a small way. The source of the trouble seemed so small, so laughably remote, as to be insignificant. A load of tea is dumped into a harbor, an archduke is shot, and suddenly a tinderbox is lit, a crisis erupts, and the world is different. In this case, the shot was Long-Term Capital Management, a private investment partnership with its headquarters in Greenwich, Connecticut a posh suburb some forty miles from Wall Street. LTCM managed money for only one hundred investors, it employed not quite two hundred people, and surely not one American in a hundred had ever heard of it. Indeed, five years earlier, LTCM had not even existed. But on the Wednesday afternoon of September , , Long-Term did not seem small. The chairman of the New York Stock Exchange joined them, as did representatives from major European banks. Unaccustomed to hosting such a large gathering, the Fed did not have enough leather-backed chairs to go around, so the chief executives had to squeeze into folding metal seats. Although McDonough was a public official, the meeting was secret. Since mid-August, when Russia had defaulted on its ruble debt, the global bond markets in particular had been highly unsettled. Long-Term, a bond-trading firm, was on the brink of failing. The fund was run by, John W. Meriwether, formerly a well-known trader at Salomon Brothers. Meriwether, a congenial though cautious midwesterner, had been popular among the bankers. It was because of him, mainly, that the bankers had agreed to give financing to Long Term-and had agreed on highly generous terms. But Meriwether was only the public face of Long-Term. The heart of the fund was a group of brainy, Ph. Many of them had been professors. Two had won the Nobel Prize. All of them were very smart. And they knew they were very smart. For four years, Long-Term had been the envy of Wall Street. The fund had racked up returns of more than 40 percent a year, with no losing stretches, no volatility, seemingly no risk at all. Its intellectual supermen had apparently been able to reduce an uncertain world to rigorous, cold-blooded odds-they were the very best that modern finance had to offer. The fund had entered into thousands of derivative contracts, which had endlessly intertwined it with every bank on Wall Street. If Long-Term defaulted, all of the banks in the room would be left holding one side of a contract for which the other side no longer existed. In other words, they would be exposed to tremendous-and untenable-risks. Undoubtedly, there would be a frenzy as every bank rushed to escape its now one-sided obligations and tried to sell its collateral from Long-Term. Panics are as old as markets, but derivatives were relatively new. Officials had wondered what would happen if one big link in the chain should fall. McDonough feared that the markets would stop working, that trading would cease; that the system itself would come crashing down. Its capital was down to the minimum. The fund had already gone to Warren Buffett for money. It had gone to George Soros. It had gone to Merrill Lynch. One by one, it had asked every bank it could think of. Now it had no place left to go. That was why, like a godfather summoning rival and potentially warring- families, McDonough had invited the bankers. If each one moved to unload bonds individually, the result could be a worldwide panic. If they acted in concert, perhaps a catastrophe could be avoided. He wanted them to do it right then-tomorrow would be too late. But the bankers felt that Long-Term had already caused them more than enough trouble. Merrill Lynch, the firm that had brought Long-Term into being, had long tried to establish a profitable, mutually rewarding relationship with the fund. So had many other banks. But Long-Term had spurned them. The professors had been willing to trade on their terms and only on theirs-not to meet the banks halfway. The bankers did not like it that now Long-Term was pleading for their help. And the bankers themselves were hurting from the turmoil that Long-Term had helped to unleash. Weill, chairman of TravelersSalomon Smith Barney, had suffered big losses, too. As McDonough looked around the table, every one of his guests was in greater or lesser trouble, many of them directly on account of Long-Term. The bankers were afraid, as was McDonough, that the global storm that had begun so innocently with devaluations in Asia, and had spread to Russia, Brazil, and now to Long-Term Capital, would envelop all of Wall Street. Richard Fuld, chairman of Lehman Brothers, was fighting off rumors that his company was on the verge of failing due to its supposed overexposure to Long-Term. David Solo, who represented the giant Swiss bank Union Bank of Switzerland UBS , thought his bank was already in far too deeply, it had foolishly invested in Long-Term and had suffered titanic losses. David Komansky, the portly Merrill chairman, was worried most of all.

Chapter 4 : John Meriwether - Wikipedia

Long-Term Capital Management was a massive hedge fund with $ billion in assets. It almost collapsed in late If it had, that would have set off a global financial crisis. LTCM's success was due to the stellar reputation of its owners. Its founder was a Salomon Brothers trader, John.

The anniversary will undoubtedly be marked by various retrospectives analyzing those events. For a longer-term perspective, though, it may be helpful to consider another anniversary that will be observed in September LTCM was the largest hedge fund operating in the United States and its brush with death provided a preview of some of the forces that would contribute to the near collapse of the U. In August and September , as in September , market fears were all consuming. The events of September did not involve subprime mortgage-backed securities or credit default swaps, which were significant factors in the financial crisis. Nonetheless, the events leading to the financial crisis in September suggest that important lessons from the LTCM case were not adequately internalized either by the market participants or by the regulators. The problems identified in the LTCM case, which I discuss in detail in a recent article, all reappeared and were the significant factors in the financial crisis. The first lesson from the LTCM episode was the realization that the financial difficulties of a large nonbank financial company could present systemic risk. Previously, the concept of systemic risk and its corollary concept of too-big-to-fail had been analyzed in terms of banking institutions. As the chairman of the House Banking Committee noted at the outset of the initial congressional hearing on LTCM, the rescue of LTCM was the first time that the too-big-to-fail doctrine had been applied beyond insured depository institutions. The second lesson related to the risk presented by excessive leverage. Virtually every analysis of the LTCM case concludes that the excessive leverage of LTCM through its balance sheet and off-balance-sheet exposures was a crucial factor in causing its near failure. The issue of excessive leverage was not limited to LTCM or other hedge funds. Other financial institutions in were as leveraged as, and in some cases, more highly leveraged than LTCM. The general fragility of short-term repo financing for nonbank entities like Bear Stearns and Lehman Brothers would come to be recognized in To mitigate the funding risk from its heavy reliance on repo financing, LTCM chose to use term repos to fund most of its balance sheet. The regulatory response to the financial crisis has been to create incentives for regulated financial institutions to switch from overnight or open repos to longer term repos. The use of term repos was a rare positive lesson from the LTCM episode, although even the use of term repos could not in the end protect LTCM from the deluge of collateral calls on its huge derivatives book. The fourth lesson related to the risks presented by large off-balance-sheet exposures, particularly those created through OTC derivatives. The fifth lesson related to a general lack of rigor in the risk management policy, process and procedures at LTCM and at many of its lenders and counterparties. Although significant strides in counterparty risk management were thought to have been made by large banks and securities firms in the years following the LTCM episode, the Senior Supervisors Group reports issued in March and October found significant risk management failures at many of the largest financial institutions in the run-up to the financial crisis. The Basel Committee on Banking Supervision was in in the process of developing a new approach that would rely to a significant extent on the internal VaR models of the largest banks for determining their capital requirements. The use of internal VaR models for calculating capital requirements would come to the fore again at the time of the financial crisis. The seventh lesson related to the potential systemic vulnerability created by the prospect of a mass close-out of derivative positions in the case of a default by a large counterparty, resulting in a fire sale of collateral supporting the derivative positions. The rescue of LTCM by its counterparties was prompted by concerns among its largest counterparties about such a prospect. This particular vulnerability arises from the exemption for a derivative counterparty from the automatic stay and other related provisions in the Bankruptcy Code. These exemptions mean that a counterparty can, in the event of a default or cross-default by its counterparty, immediately close out the derivative transaction and sell the underlying collateral. Intended originally to protect the non-defaulting counterparty, it would likely by virtue of cross-default provisions lead to a simultaneous close-out and fire sale of collateral by many counterparties. This issue was encountered again in

September when several large financial institutions like Lehman Brothers filed for bankruptcy or, like AIG, faced the imminent prospect of having to do so. Some observers might suggest that in we let a good crisis go to waste by not enacting any reforms. We did not make the same mistake after the financial crisis. Yellen, Vice Chair, Bd. Hearing Before the H. Prior to the LTCM episode, discussion of systemic risk and too-big-to-fail issues focused on the banking sector. Litan, Financial Regulation in the Global Economy discussing systemic risk exclusively in the context of banking institutions. In August , following the Russian government default, LTCM suffered large losses, increasing its leverage ratio to to-1, and by the end of the third week in September, further losses, increasing its leverage ratio to to General Accounting Office in its own report on LTCM noted that in two of the largest investment banks had balance sheet leverage ratios in the range of to to Gorton, Slapped in the Face by the Invisible Hand: Banking and the Panic of May 19, , https: Actions Needed to Protect the financial System This report actually occasioned a response by Professor Myron Scholes, a principal of LTCM and a recipient of a Nobel prize in economics for his work on the Black-Scholes model for pricing options. He was nonetheless prescient in identifying the scenario that would two years later lead to the collapse of LTCM: Lack of liquidity or depth in markets can lead to the failure of financial institutions. OTC-derivative contracts are illiquid. There is not a developed secondary market for these derivatives, and it is virtually impossible to remarket esoteric derivative contracts, let alone to do so over a short time period. In pricing OTC-derivative contracts, financial institutions must reserve capital or suffer large losses if forced to liquidate their positions over a short period of time. That is, if the markets are illiquid, market-price spreads are likely to increase dramatically when many dealers are trying to reduce the size of their positions and all are on the same side of the market. Hearing Before the S. This post comes to us from Paul L.

Chapter 5 : Lessons From Long-Term Capital Management | Seeking Alpha

With the benefit of hindsight, some of the geniuses at Long Term Capital Management might have considered financial modelling for a "black swan" event. The story is also one for detailing the shortcoming and weakness of human character.

Chapter 6 : Analysis - The Forewarning In | The Warning | FRONTLINE | PBS

The Long-Term Capital Management (LTCM) crisis was caused by not just miscalculation but also pride. LTCM was a collection of highly talented, highly skilled, and highly accomplished people. Nevertheless, the firm imploded in financial ruin and almost took the global economy down with it.

Chapter 7 : A Retrospective on the Demise of Long-Term Capital Management | CLS Blue Sky Blog

Long-Term Capital's partners were shocked that their trades, spanning multiple asset classes, crashed in unison. But markets aren't so random. In times of stress, the correlations rise.

Chapter 8 : Long-Term Capital Management - Wikipedia, the free encyclopedia

That was followed by the collapse of Long-Term Capital Management in the late s, and especially given that this was a firm driven by the brains of some of the most widely respected finance academics, it was not a subject many talked about with anything other than admirable awe in the years before.

Chapter 9 : Long-Term Capital Management - Wikipedia

THE financial crisis is a result of many bad decisions, but one of them hasn't received enough attention: the bailout of the Long-Term Capital Management hedge fund. If regulators had been.