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The Fateful Weekend

Lehman's last efforts to save the company

On 10 September 2008, Dick Fuld presented what would be the firm's last earnings report, announcing the loss of $3.9bn, the second quarterly loss after June's loss of $2.8bn:

> This is an extraordinary time for our industry, and one of the toughest periods in our Firm's history. The strategic initiatives we have announced today reflect our determination to fundamentally reposition Lehman Brothers by dramatically reducing balance sheet risk, reinforcing our focus on our client-facing business and returning the Firm to profitability.[1]

The early announcement included an increase in total stockholders' equity of $28.4bn, up from $26.3bn, an estimated liquidity pool of $42bn, and plans to sell a majority stake in its asset management unit. Lehman also revealed that it would separate off a 'vast majority of the firm's commercial real estate assets from our core business by spinning off those assets to our shareholders and to an independent, publicly traded entity which will be independently capitalised'. The plan was to place between $25bn and $30bn of its $32.6bn portfolio in SpinCo, or REI Global as the company would be called. Lehman had reserved the name in Delaware on 4 September. Fuld acknowledged that the 'losses created by these concentrated legacy assets have clouded the underlying value of our franchise', adding that while the firm's clients and trading partners 'continue to stand with us, we nevertheless cannot put the strength of our franchise and their continued trust at risk'.[2] Fuld also claimed that they were in the final stages of raising capital with the sale of a majority stake in their investment management division, whilst retaining the Lehman and the Neuberger Berman brands. A potential deal with a Korean sovereign wealth fund, the Korean Investment Corporation, which would have provided Lehman Brothers with $5bn, had fallen through in August 2008. Negotiations had then taken place with the Korean Development Fund

(KDF). It was thought that the fact that negotiations had taken place with KIC would not affect the discussions with KDF, as its CEO, Min Euoo-Sung, was head of Lehman's Korean operations for three years until 2007. However, the relationship did not help.

All of the proposed actions were no more than plans, as opposed to completed deals or agreements. They did not inspire confidence. On the same day, Moody's announced that it had placed 'on review with uncertain direction' the long-term ratings of Lehman Brothers Holdings Inc (as well as its principal rated operating and guaranteed subsidiaries). The ratings review reflected the 'fluidity' of the current situation, as well as Moody's assessment of the likelihood of the sale. Blaine Frantz remarked that 'a strategic transaction with a stronger financial partner would likely . . . result in a positive rating action'.[3] The effect of this on 10 September was to encourage a further fall in Lehman's shares, which having risen gently during the day, fell by 6.9 per cent to $7.25 at 4.00 pm in the New York Stock Exchange composite trading. The next day was no better, as analysts, having had time to study the Real Estate Investment Global proposal, were not convinced, to say the least, and advised their clients accordingly. It failed to impress JP Morgan or other potential investors. The new company would require $8bn of equity from Lehman, with the remainder to be borrowed from Lehman and outside investors. The advantage for Lehman was that it would be able to hold the commercial real estate assets, since as 'a new company it would not have to mark-to-market, allowing its assets to be monetized in an orderly manner over time, with more negotiating leverage and at prices which maximize returns'. Lehman's shares, which at one time had been worth $66.73 and had averaged in the high to mid-fifties at the beginning of 2008, continued to plummet, closing at $4 on 12 September.

It was now clear that action would have to be taken, and in the form of a buyer. Indeed, this is just what Paulson had been advising Fuld ever since the rescue of Bear Stearns and throughout the summer. 'With all the attention on the GSEs, I still kept an eye on Lehman's travails, speaking regularly with Dick Fuld about his options. The best of these was to sell his firm, and the Bank of America was the most likely buyer.'[4]

The gathering storm

The pre-announcement of Lehman's earnings did not reassure the market. Geithner commented that Fuld did not seem to realize that 'the endgame had began. We still hoped to find a last-minute buyer, but my team had began drawing up a "Lehman liquidation game plan".' Bank of America agreed to give Lehman another look, but did not have a due diligence team. Lewis was already in a dispute with Countrywide and wanted written assurances. Geithner refused, and Ken Lewis then agreed to send his team.[5]

On Thursday 11 September, Geithner confirmed to Fuld that Barclays was still interested in bidding for the company. Eventually, Robert Diamond, CEO of Barclays Capital and President of Barclays plc, advised Dick Fuld that he and his team would arrive in New York to examine Lehman's books. This had already been agreed with Tim Geithner and Hank Paulson. Indeed, Paulson recalls telling Diamond that he did not think that he could give Barclays a leg-up, and nor could Lehman's, but 'because the government couldn't put any money into the transaction, Barclays should focus on Lehman's troubled assets so we could discuss realistically how they could get a deal done'.[6]

Meanwhile, both Paulson and Geithner hoped that Ken Lewis, CEO of Bank of America, would buy Lehman Brothers, but both made it clear that the Government would not finance the deal, but would assist by encouraging 'others in the industry to help finance the part that you weren't going to take. It would be just like the LTCM consortium'.[7] Lewis was not going to take LTCM as an example, having recently observed the Federal Reserve assisting JP Morgan to acquire Bear Stearns, but he agreed to put a proposal together for consideration by the other Wall Street CEOs. All that happened was that the situation for Lehman deteriorated, because JP Morgan reiterated its \$5bn collateral call, with the possibility of another \$10bn by the weekend. The company had borrowed \$230bn overnight on the repo market, short-term funding which could be withdrawn at a moment's notice. That just added to the underlying major problem, that Lehman had overvalued its assets so that for the Bank of America and Barclays, the risks were too high without financial support from the Federal Reserve. Paulson and Geithner had discussed a liquidation consortium which might subsidize the sale of Lehman, if the Bank of America or Barclays refused to complete the purchase on their own, but the proposal had not yet been worked out. This was further discussed with Ben Bernanke, then Chairman of the Federal Reserve and Chairman Cox of the SEC, and all four concluded that it was to be a private-sector solution and that there would be no public money.[8] That was the clear message. Hence on Thursday evening, Michele Davis, Paulson's Director of Communications, briefed journalists off the record that there would be no bail-out.[9]

On Friday 12 September, Paulson began the day by reading the press, where the message he had wished to convey had not been expressed in clear enough terms. It was supposed to be 'no more bail-outs'. Although the front-page story in the *Washington Post* said, 'The Government is looking for an agreement that would not involve public money', what was said by the *Wall Street Journal* and the *New York Times* mattered most. The front page story on the *Wall Street Journal*, 'Lehman Races to Find a Buyer', left the door open, although it also reported that the 'Federal Reserve and Treasury Department had been working with Lehman to help resolve the bank's troubles, including talking to potential buyers . . . Federal officials currently aren't expected to structure a bail-out along the lines of the Bear transaction'. Paulson records that 'Michele quickly went to CNBC to reiterate that there would be no public money'.[10] But in his response to questions from James Stewart which appeared in the *New Yorker* in 2009,

> Paulson now acknowledges, as some in the room suspected, that the Government was more amenable to funding a rescue than it let on. 'We said no public money', he told me. 'We said this publicly. We repeated it when these guys came in. But to ourselves we said, "If there's a chance to put in public money and avert a disaster, we're open to it."'[11]

These remarks should perhaps be seen as wishful thinking only a year after the events of September 2008. In his own account, five years later, he says that he would 'continue to believe that we did the only thing we could have done'.[12]

Geithner and Paulson had agreed that the only solution was to call all the Wall Street CEOs together at 6.00 pm to the New York Federal Reserve Bank. Telephone calls were made after the markets closed at 4.00 pm The CEOs would be urged to provide a private market solution. The Bank of America's proposals were complicated, since their due diligence had shown that Lehman's capital hole was about $20bn. Ken Lewis explained that if he bought the investment bank it would have to leave about $40bn of assets. His bank would then split the first $2bn in losses 49 per cent to Bank of America and 51 per cent to the Government. The Government would have to absorb 100 per cent of all the other losses on the remaining assets, and the BoA would give the Government warrants to buy its shares.[13] Barclays began its own due diligence, according to the minutes of the meeting of the board of directors, 12 September 2008. The Examiner also notes that Lehman posted $5bn cash collateral at JP Morgan's request on 11 September and that Citibank had amended its Direct Custodial Services Agreement to strengthen its lien on Lehman's assets. Lehman calculated that its easily monetized liquidity pool was $2bn. John Varley, chief executive of Barclays advised Paulson that Barclays' board was prepared to consider a possible bid for Lehman.

Meanwhile at the Friday evening meeting on 12 September, the CEOs were divided into groups, to each of which was assigned one of the following: minimizing the effects of Lehman's bankruptcy, focusing on unwinding Lehman's derivatives, secured funding and tri-partite repo transactions. One group would consider how the industry could buy all of Lehman Brothers and liquidate it over time, while another would consider how to finance those parts of Lehman Brothers that a prospective buyer did not want. Geithner then told the CEOs to return on Saturday morning and 'be prepared to do something'. Paulson first noted the absence of any Lehman representatives and then made it clear that federal money would not be available to rescue Lehman, but a failure to find a solution would have an impact on the whole industry.[14]

The Examiner noted that Diamond stated that he had told Fuld that there would not be a deal at the 'current market price' because of the risk and the current situation, and that Barclays' only interest was as a 'rescue situation', that is, at a 'very, very distressed price'.[15] Some members of the Lehman team felt that 'Diamond was contemplating the purchase of the whole firm.' It is understandable that their hopes were raised, but it is doubtful that Barclays was seriously considering such a purchase.

It is worth noting that the teams working for BoA and Barclays took only a few hours to assess the extent of the poor-quality assets Lehman held, and to find the holes in the balance sheets. Tom Russo, Lehman's Vice Chairman and Chief Legal Officer, pointed out that the capital hole was discovered by Lehman's competitors, but later the existence of such a large hole was contested. Of course, the SEC did not have such a large contingent of highly skilled staff, but they did have time and should have been aware of the market signals, as the defaults continued to rise in the subprime market.

Saturday 13 September 2008

Paulson and Geithner arrived at the New York Federal Bank at 7.00 am, where Paulson first spoke with Ken Lewis, who reported that Lehman's assets were worth even less than they had estimated the previous day. That confirmed Paulson in his view that Lewis did not really want to buy Lehman Brothers. That was followed by a conference call with Barclays' Chairman Marcus Agius and CEO John Varley, in which they expressed serious concerns about some of Lehman's assets, stating that Barclays would have to reject the problematic commercial mortgages, allegedly worth $50bn. They were also concerned about other investments, including undeveloped land and Chrysler bonds.

The meeting began at 9.00 am Paulson indicated that Barclays was the most likely buyer. The assessment for any decisions to be made was carried out by Brady Dougan of Credit Suisse, who reported that the real estate assets were worth between $17 and $20bn instead of the $41bn. Paulson was shocked by the disparity of $20bn between what Lehman said its assets were worth and 'their true value'.[16]

The meeting ended without any decisions being made. Paulson records that as he left the meeting and crossed the main lobby, he observed teams of lawyers, bankers, chief risk officers, specialists on lending and private equity, one for each of the banks represented, so that a 'war-room atmosphere' was developing. Geithner and Paulson decided to meet with Lloyd Blankfein (Goldman Sachs), Jamie Dimon (JP Morgan Chase) and John Thain (Merrill Lynch). Paulson knew that if Lehman Brothers collapsed, Merrill would be the next to go, as it had a weak balance sheet.

The next meeting with the Bank of America was fruitless, as their deal team had unearthed yet more bad assets, totalling between $65 and $67bn, including $33bn of commercial mortgages and real estate and $17bn residential mortgage-backed securities. They believed that Lehman's valuation of its own commercial real estate positions were too high. Lewis referred to a Lehman black hole of $66bn. These shortfalls would destroy Lehman's equity of $28.4bn. They were not prepared to fund any of these without government assistance to offset the undesirable assets, which effectively ruled them out as a contender. However, it is possible that Lewis did not want too close an examination of his own assets, after the purchase of Countrywide Financial Corp in January 2008, a deal which would come back to haunt him in later years. In May 2008, Lehman and Bank of America Strategic Ventures and Barclays Capital had jointly provided a $4.7bn loan for a leveraged buy-out of the Archstone-Smith REIT, together with Tishman Speyer, according to SEC filings. Prices started to fall soon after the deal was completed, making it difficult for the three banks to sell the equity, leaving them with the much of the bridge loan. Perhaps Lewis's involvement in the Archstone deal meant that he had more insight into the value of Lehman's commercial real estate investments than he cared to admit. Apparently, Lewis then began talks with Merrill Lynch about a potential merger, without telling anyone, having already sent his due diligence team home.[17]

On his way to the next meeting, Chris Flowers stopped Paulson and advised that AIG, the large insurance company, was, according to the company's own projections, going to run out of cash in ten days. Geithner and Paulson agreed to meet with Robert Willumstead (CEO of AIG) during the day. Paulson went to the next meeting with Geithner, Dimon and Blankfein to discuss a private sector consortium. He thought these CEOs would come up with a plan, and hoped that Barclays would play its part as a result of the various telephone calls which took place during the day. It all seemed so simple: Barclays focusing on the quality of Lehman's assets and the Financial Services Authority's expectation that the bank had an adequate capital plan in place. Then Bob Diamond suddenly raised the issue of a shareholder vote being required to approve the merger, which would take between 30 and 60 days to organize, and which would require the Federal Reserve to guarantee Lehman's trading book during that period. Geithner did not promise this, but stated that if Barclays came up with a plan, then the Federal Reserve would consider its options.

After that meeting, two other potential crises emerged. If Lehman Brothers did collapse, then Merrill Lynch would be the next in line. Paulson recommended that John Thain should look to Bank of America as its buyer and then returned to Barclays. By the middle of the evening with the CEOs, Barclays would not take the overvalued assets and wipe out Lehman's shareholders. A consortium of Wall Street firms would agree to lend up to $37bn to a special purpose vehicle to hold these assets. The firms would lose collectively some $10bn, but Barclays would also contribute some of its own shares to mitigate the loss to some extent.

Paulson left the New York Federal Reserve at 9.00 pm feeling that the day had been well spent. The solutions would be finalized the following day. Geithner's take on the day differed from Paulson's. He was satisfied that Merrill Lynch would be rescued by the Bank of America, and they were in talks about a deal. It appeared that Ken Lewis preferred Merrill's army of retail stockbrokers, which explained his lack of interest in Lehman. Geithner records the same optimism. 'Barclays looked like it was ready to move on Lehman. There were still some unanswered questions – and last-minute Fed assistance still seemed possible to me – but I thought we had a decent chance to avoid the trauma of a default.'[18]

Geithner begins his description of the weekend by referring to Hank Paulson's clear and consistent message in his private calls to the market: the Government would not subsidize the purchase of Lehman. Paulson's views were all over the media on Friday 12 September. Geithner reports major papers, news wires and business TV channels detailing the Government's unwillingness to use taxpayer funds to rescue Lehman, all citing sources close to Hank. However, Geithner's own view was, 'Whatever the merits of no-public money as a bargaining position, I didn't think it made much sense of public policy'.[19]

Sunday 14 September 2008

On his arrival at the New York Federal Reserve office, Paulson learnt that, following Barclays' board meeting at 7.15 am New York time, Diamond had discovered problems with its regulators, the Financial Services Authority (FSA). Less than an hour later, Diamond and Varley informed Geithner, Christopher Cox and Paulson that they had just discovered that the FSA would not support the deal. Barclays, Paulson pointed out, had assured them that they were keeping in touch with their regulators. Subsequently, Geithner and Cox conferred with Callum McCarthy, then the FSA chairman, who provided a cautious statement of the FSA's position. The FSA had neither approved nor disapproved of the deal, but required further due diligence, to see Barclays' plans to raise capital to fund the acquisition and a guarantee for Lehman's trading book during the shareholder vote. This caution apparently came as a surprise to Paulson and Geithner, but the FSA's statement of 20 January 2010 indicates that they should have expected the response they received. It sets out the communications between Varley and Hector Sants, CEO of the FSA, Callum McCarthy, FSA Chairman and Geithner on 10 and 11 September at that time when Barclays had not yet drawn up a proposal. Again on Friday 12 September Paulson had spoken to Alistair Darling, then UK Chancellor of the Exchequer, and he had advised that the US Treasury was considering two prospective buyers but that it was unclear whether any transaction could be structured without external support. In response, Darling had advised Paulson that no transaction with Barclays would be possible if the level of risk for Barclays was inappropriate. This was the same cautious message as the one both Sants and McCarthy had given to Geithner. Paulson observes that at that time he did not understand Darling's words as a 'red flag'. McCarthy's conversation with Geithner seems to have been more explicit.[20]

On Saturday 13 September discussions continued throughout the day between the FSA and Barclays over the possible terms of an acquisition. Neither the FSA nor the board wanted Barclays to take on the assets proposed by Lehman's for REIGlobal, though Barclays were advised by the US authorities that a consortium of banks would take on these assets. Barclays also wanted the continuation of the Primary Dealer Credit Facility (PDCF). During the following day, 14 September, the FRBNY expanded its access to its PDCF, but Lehman was told that it was ineligible to access it. The UK FSA was especially concerned that since Barclays was and is one of UK's clearing banks, it was important that it should not take on risks which might have a wider systemic impact on the UK financial system.

During the afternoon, the FSA discussed the importance of cooperation between the regulators if Lehman was going to go into Chapter 11. Later that evening Barclays advised that the Federal Reserve Bank of New York had asked Barclays to guarantee Lehman's financial obligations in the time leading up to the closing of the acquisition, a guarantee which would remain in place even if the deal did not go ahead. This was obviously a key point for the board, but Barclays sought confirmation that, given the size and nature of the interim guarantee, the UK Listing Rules would require it to obtain prior shareholder approval. There was a final telephone call at the end of 13 September, in which McCarthy inquired about the state of negotiations, but also said that no specific proposal had been brought to the FSA by Barclays, but if one was, it would raise very significant issues.

On Sunday 14 September 2008, the FSA spent most of the day discussing the possible acquisition, despite having no specific proposal from Barclays. The key issue was the guarantee, to be taken on by the regulatory authorities or a consortium of banks. If the assets were guaranteed, then Barclays would have to show a robust capital position and sufficient liquidity. In those circumstances, the FSA could in theory waive the requirement for prior shareholder approval, even though this would compromise one of the fundamental principles of the FSA's listing regime. At 1.00 pm (British Summer Time), McCarthy contacted Geithner and advised him of the FSA's concerns and the issue of shareholder approval under the Listing Rules. He also advised that such a waiver would be unprecedented.

Geithner then asked if an acquisition could be restructured in the available time, but McCarthy confirmed that this was unlikely since the FSA had not yet seen a Barclays' proposal. If that was the case, Geithner replied then the US would bring forward Chapter 11 plans. Bill Rutledge, Executive Vice President of Banking Supervision at the New York Federal Reserve telephoned Sants to ask what the FSA required for the Barclays bid to be successful, and was advised once more that Varley had not provided him with a proposal. By early afternoon, Barclays had completed its scenario analysis and had concluded that it could meet the FSA's capital requirements. The FSA continued to have doubts about Barclays' ability to retain the core Tier 1 capital ratio, and concluded that the aggregate level of risk could still be unacceptable.

Later that afternoon, Cox contacted McCarthy to discuss if there was any flexibility in waiving the Listing Rules; McCarthy explained again that no specific proposal from Barclays had been received, and that the problems about capital and funding remained. This was followed about an hour later by Varley's telephone call to Sants advising him that Barclays and the New York Federal Reserve that negotiations had ceased since an acceptable proposal could not be put together in time. He also confirmed that Lehman's long-term liquidity position was uncertain and that the Federal Reserve could not offer funding or liquidity support beyond the inauguration of the next President.

The FSA evidence indicates that their concerns about a Barclays bid had been shared with Geithner and Paulson and members of their team at an early stage. Alistair Darling had telephoned Paulson on Friday 12 September in the early afternoon, a call which Paulson says he did not see as a 'red flag' at the time. Later, by 14 September, he realized that what he had taken as 'understandable caution should have been taken as a clear warning'. In his account of his days as Chancellor, Darling recalls the discussion with Paulson as one in which Paulson told him that they had three options: (i) a wind-down; (ii) an industry consortium; or (iii) a straight take-over, of which he preferred the second. This is where Barclays came in. Darling states that: 'I made it clear that I was not against a takeover or investment by a British bank in principle but I needed to be certain that Barclays was not taking on more risk than it could manage.'[21] Darling further points out in his book, that there was no clear deal on the table. The Bank of America had pulled out of the purchase of Lehman, but the reasons for that were not given to the UK. Nor was any financial support being offered. The US wanted to override the requirement for a shareholder vote. On Sunday 14 September, Darling had another conversation with Paulson, by which time, Darling had concluded that, 'not only would we have to stand behind Barclays … but we would be overriding the rights of millions of shareholders who might get cleaned out.' He added that 'there was no deal on the table … and we could not stand behind a US bank that was clearly in trouble'. This telephone call settled the matter for Paulson, who had been exasperated by conversations with Callum McCarthy, who had raised countless objections but had not said 'No' unequivocally. Darling notes that in his conversations with John Varley, he 'got the impression that the board was divided over whether to buy Lehman, given the risks involved and the lack of US government support'. John Varley told Darling that he would understand, if we decided not to support the deal, and if that was the case, 'Barclays would not proceed.'[22]

Diamond must have been aware of the Listing Rules and the requirement for a shareholder vote, and if he had decided to overlook it, then his team of advisers would have reminded him. The fact is that Diamond did not have a plan of any kind and did not produce even an outline proposal during the weekend. Thus the possibility of Barclays rescuing Lehman Brothers disappeared with a series of telephone calls when Geithner contacted Varley and Diamond after the Barclays board meeting at 7.15 am New York time, and were told that the FSA refused to approve the deal. They claimed not to understand why. Geithner and Cox then spoke separately with Callum McCarthy and once again the FSA said that it neither approved nor disproved the merger, but needed more due diligence. But Barclays' plans to raise more capital and the shareholder vote all meant delay, and time was simply not available. The final decision to allow Lehman to collapse had to be taken. Lehman could not open for business unless it had a major financial institution to guarantee its trades. The die was cast.

That only left the decision to be taken by Lehman's board, but even that was problematic. Lehman was in no hurry to file, and Cox, the SEC's Chairman, was working on a press release to advise and reassure Lehman's broker-dealer customers that they would be protected. It fell to Paulson to ensure that Lehman filed for bankruptcy. Paulson comments: 'I understood that it was unusual and awkward for a regulator to push a private sector firm to declare bankruptcy' but it was necessary 'for the good of the rest of the system'.[23] Finally, Cox, along with Thomas Baxter, General Counsel of the New York Federal Bank, together with other staffers from the SEC and the Federal Reserve, called just after 8.00 pm to reiterate that there would be no government rescue. A late-night conference call confirmed that Lehman would shortly file for bankruptcy under Chapter 11, but that Lehman Inc. would be kept afloat by the Federal Reserve. The FSA asked if this funding would be kept available for Lehman Brothers International (Europe), but this was refused. Lehman did not file for bankruptcy until 1.45 am on Monday 15 September 2008. LBIE, Lehman Brothers Ltd, Lehman Brothers Holdings plc and LIB UK Holdings Ltd entered into administration in the UK, and Lehman into Chapter 11 at 7.56 am on that day.

The Examiner notes that on 14 September the FRBNY made it clear that it would no longer keep on funding Lehman. On the same day, the FRBNY both broadened the collateral eligible to be pledged at the PDCF but excluded Lehman from using it to continue its normal operations, perhaps to ensure that the firm did file for bankruptcy immediately. The FRBNY advised Lehman it would provide up to two weeks' overnight secured funding through the PDCF to allow LBI to have an orderly liquidation.[24]

As far as Lehman was concerned, the bankruptcy affected about 8,000 subsidiaries and affiliates, with $600bn in assets and liabilities, over 100,000 creditors, and about 26,000 employees, triggering defaults in many derivatives contracts. It led to 80 insolvency proceedings of its subsidiaries in 18 countries.

It had, of course, much wider ramifications through the entire global financial system.

One day later, on 16 September 2008, the Federal Reserve Bank announced that it would step in to save AIG with an $85bn loan collateralized by AIG's assets, to be repaid with the proceeds of the sale of those assets. That gave the Government a 79.9 per cent equity interest in AIG.

Many questions have been asked about that infamous September weekend. They range from whether or not Lehman had a huge capital 'hole', Lehman's over-valuation of its real estate assets, to whether or not the bank was solvent, should the Federal Reserve have bailed out Lehman, was Alistair Darling, the UK Chancellor of the Exchequer, alone in blocking the Barclays deal, and was it true that the Federal Reserve did not have the legal powers to rescue Lehman? The issues of Lehman's valuation of its assets and its capital were thoroughly explored by the Examiner's Report, the subject of the following chapter.

Was the Barclays' deal a real deal?

Diamond failed to produce a detailed proposal during the whole weekend. But given the fact that the weakness of Lehman Brothers was known, and that many in the market expected Lehman to be next after the collapse of Bear Stearns and the extent of the losses announced in June and September, he would surely have concluded that the chances of buying Lehman Brothers might be extremely high. One insider stated that there was never any intention to acquire Lehman Brothers, but only to cherry-pick assets, whilst avoiding some of the worst business risks that would inevitably have followed if they had.[25]

Diamond might well have shown greater interest to the Federal Reserve than he actually felt in order to give him good standing when some of the options provided a partial way out. That is, of course exactly what happened. Just two days after Lehman filed for Chapter 11, Barclays announced that it would acquire Lehman Brothers North American investment banking and capital markets operations and supporting infrastructure. That included Lehman Brothers' New York headquarters and two data centres, all for $1.75bn, a price which the *New York Times* described as a 'fire sale' and which was much less than Lehman expected.

Lawyers acting for the Lehman estate claimed that Barclays had improperly reaped an $11bn windfall from the deal by secretly negotiating a discount for Lehman's North American operations, and pursued this case through the courts.

In his 103-page decision Judge James Peck of the United States Bankruptcy Court in Manhattan rejected the claims. 'The sale process may have been imperfect but it was still adequate under the exceptional circumstances of Lehman's collapse'. Judge Peck also rejected a separate claim by a federal trustee assigned to the Lehman case, that Barclays owed his office about $7bn. Lehman had sought to amend the sales order that Judge Peck had approved just days after the investment bank filed for bankruptcy. The Lehman estate contended that Barclays benefited from a $5bn discount that they had been given during the completion of the sale. The judge rejected their arguments, stating that these new facts 'do not change the essence of the approval process and would not have made any difference to the court's ruling'. He concluded that the purchase of Lehman's investment bank had been done in good faith, and denied Lehman's request to recover an alleged $11bn windfall. He added that the perception at the time was that the

> transfer to Barclays benefitted all interested parties, mitigated systemic risk and helped to save everyone of us from an even greater calamity. Nothing in the voluminous record presented to the court in these protracted proceedings has done anything to change that undoubtedly correct perception.[26]

The case took several months in the courts and was finally decided on 22 February 2011.

Could Lehman have been saved?

Before moving on to the question of why the Federal Reserve allowed Lehman to fail, it is worth considering the role of the Federal Reserve, together with the Treasury, prior to the fateful weekend. Thomas Baxter in his evidence to the FCIC, stated that after the Bear Stearns episode in March 2008, it was clear that some primary dealers were in difficulties. The Federal Reserve introduced the Term Securities Lending Facility (TSLF) to help primary dealers with their access to term funding and collateral and introduced the PDCF at the same time. As part of the process,

> the New York Fed sent small teams of two monitors into each of the four remaining investment banks-something it had never done before ... Let me again emphasize that we were not intending to conduct supervisory activities with our personnel, nor were we attempting to displace the SEC, the primary regulator of the investment banks. To the contrary, we were acting as a potential

> lender to these potential borrowers and we wanted to know our new borrowers better.[27]

On 10 March, Geithner advised the Federal Open Market Committee (FOMC) that, 'If we have evidence, directly or through the supervisors, of some material erosion in the financial business of those institutions from a solvency perspective, that will cause us to reflect on what we do with those institutions going forward.' But perhaps to guard the Federal Reserve against any criticism, he added, 'I wish it were the case that we could condition this step on a change in the regulatory regime that would give us that capacity.'[28]

The role was strictly limited and set out by Vice Chairman Donald Kohn in his testimony before the Subcommittee on Securities, Insurance and Investment on 19 June 2008. The on-site monitors were expected to:

> ensure that any credit that the Fed extended to the investment banks would be repaid and to ensure that the investment banks did not become too dependent upon Federal Reserve Credit and would continue to work on improving their liquidity positions and financial strength.

A few weeks after that testimony, on 7 July 2008, the SEC and the Federal Reserve signed a Memorandum of Understanding which agreed on information-sharing and cooperation to assist the SEC in its supervision and the Federal Reserves to carry out their responsibilities. The SEC and the Federal Reserve would share information and analysis of the financial condition, risk management, internal controls, capital, liquidity and funding resources of those firms. Mr Angulo reported, 'We have accessed information from these companies through the PDCF and TSLF, so we'll share that with the SEC.'[29]

If effective, the monitoring should surely have revealed the serious weaknesses in Lehman's position, and perhaps have enabled Lehman to alter its strategy even at that late stage. No doubt the efforts Lehman made did improve its position to some extent, although Baxter insisted in his statement that 'at no time, however, did any one at the New York Federal Reserve believe that Lehman had sufficient liquidity to withstand what was to come in September', which included the decision to take Fannie Mae and Freddie Mac into conservatorship on 8 September. Both supervisors and monitors seemed to limit their role to that of observing a slow-motion train crash, rather than taking any corrective or enforcement actions to prevent it at an earlier stage. The actions of the Treasury and the Federal Reserve Bank of New York after the collapse of Bear Stearns, and especially over the summer months, repay close scrutiny.

Lehman pre-announced its first loss since going public on 9 June 2008. Yet the on-site monitor, Kirsten Harlow stated in her email to several officials that there was 'no adverse information on liquidity, novations, terminations or ability to fund either secured or unsecured balances has been reported'. She also reported that Lehman had taken steps to improve liquidity, increasing its liquidity pool to \$45bn.[30] Two days later, she reported that there were trading issues with four financial institutions, including Santander, Westpac and the Commonwealth Bank of Australia, and that Citi had decided to reduce clearing/settlement lines to Lehman from about \$20bn to around \$10–12bn. The FRBNY Senior Adviser in the Division of Banking Supervision and Regulation, Tim Clark, replied: 'this is not sounding good at all'. Of course it was not; but nothing else happened.

Later in June, the FRBNY undertook liquidity stress testing of Lehman Brothers, which led to the conclusion that 'Lehman's weak liquidity position was driven by its relatively large exposure to overnight CP [commercial paper] combined with overnight secured funding of less liquid assets and that any downgrade would result in significant collateral calls.' The report concluded that Lehman should improve its liquidity position by \$15bn.[31] In July, Pat Parkinson, Deputy Director of the Research and Statistics Division commented that although other firms had pulled their Repo lines from Lehman, 'there are other such reports but overall LB's funding seems to have held up thus far. Lots of anxiety nonetheless.' During August, New York Federal Reserve officials begin to consider how to deal with a potential Lehman failure.

Throughout June, July and August, Treasury officials worked on various scenarios to clarify the extent of Lehman's over-the-counter (OTC) derivatives and tri-party repos. These activities took place in the summer of 2008, a full year after Standard & Poor's and Moody's downgraded securities backed by subprime mortgages, placing a large number on credit watch. Two Bear Stearns hedge funds involving CDOs collapsed, Countrywide announced a large increase in subprime mortgage defaults and was bought by Bank of America in January 2008, against a background of rising defaults and house prices continuing to fall. The point is that against that background, the Federal Reserve and the Treasury should already have had sufficient information about the risks Lehman Brothers was taking, and if they had acted on it in 2007 and 2008, then perhaps the company could have been rescued.

In the months before Lehman collapsed, there was much discussion between regulators and Treasury officials, focusing on Lehman after the Bear Stearns debacle. On 6 February 2008, Erik Sirri, Director of Markets and Trading at the SEC, received a risk management review of the CSEs from the SEC's Office of

Prudential Supervision and Risk Analysis. This was based on discussions with senior risk managers over a four-week period. They claimed that they were reducing risks and hedge positions as the economy continued to slow down, but the underlying risks were increasing, with fewer ways of offsetting losses. Mounting concerns were expressed about monolines and credit default swaps, and what would happen in the case of a default. Lehman had raised its risk appetite limit to $4bn and its firm-wide VaR limit to $150m. All of this information was gathered, but it appears that no further action was taken, nor was it shared with the Federal Reserve and the Treasury at this stage.

In May 2008, an email to Stephen Shafran, one of Paulson's former colleagues at Goldman Sachs and then senior adviser to Paulson at the Treasury, discussed the possibility of discovering more about their tri-party repos and OTC derivatives. Treasury officials planned to ask Lehman about their OTC derivatives positions directly, but also to set up the private-sector default management group, and ask them to advise on the information required from a troubled dealer to assess the potential impact of close-out of a dealer's OTC derivatives books on its counterparties and on the financial markets, and to assess the potential risks and returns for an acquirer.[32] Again, it is not clear if the requested information was ever given, or what use was made of the information in, for example, assessing the risks Lehman faced.

On 17 June 2008, Donald Kohn, as a board member of the Federal Reserve Bank, proposed that both the TSLF and PDCF should be extended until the end of the year, and that the matter should be discussed with the Federal Open Market Committee.[33] This was agreed by the FOMC. In July, the New York Fed, via further email exchanges, discussed the possibility of providing liquidity to Lehman through the PDCF function.

The plan was reiterated in July when Geithner circulated a paper in which the PDCF would step in if a dealer should lose the confidence of its investors or the clearing bank, both by providing overnight financing and then also by replacing the credit provided by the clearing bank during the day. By such actions the Federal Reserve would hope to support market confidence in the dealer and by continuing the smooth function of the market, in the tri-party repo itself. Information on Lehman's repo collateral was finally received, and its exposure was $236.4bn.[34] Bill Dudley of the New York Federal Reserve put the 'good bank, bad bank' idea on the table, but that was not pursued. The use of the PDCF was rejected partly because there were doubts about its legality, and also because Lehman's clearing bank would be aware very quickly that confidence in the bank had been lost, and would refuse to unwind the previous night's repos, thus creating more problems. By 19 August staff at the New York Federal Reserve still had not received sufficient information, and were reluctant to dig deeper, as the meeting with Lehman 'caused a stir ... and we had to assure them that our questions were not institution specific'.[35] On 9 September, an email from Meg McConnell requested a note for Geithner on 'what's different and what's the same' (Bear Stearns and Lehman) for his discussion with Bernanke later that day. Lehman's tri-party repo book was much larger than Bear's, and investor concentration was high with the top-10 counterparties providing 80 per cent of the financing. These estimates were based on the assumption that Lehman itself had an accurate assessment of its assets, as was later revealed in the Examiner's Report. All of this should have been known, assessed and action taken months, if not a year, earlier. But even then, 2007 was hardly a tranquil year for the markets.

It was marred by the 'panic of 2007'. Between June and September, a whole series of events, including Bear Stearns' announcement that two of its funds were liquidated even though the firm had spent $3.2bn in bailing them out, BNP Paribas suspended three investment funds, rising defaults hit Countrywide and its share prices plunged amid fears of bankruptcy. The Federal Reserve Board reduced the primary credit rate to 5.75 per cent, as well as increasing the borrowing term to 30 days. The FOMC issued a press release observing that the 'downside risks to growth have increased considerably'. As the foreclosures on subprime mortgages continued to rise, home loan providers filed for Chapter 11 bankruptcy, fears mounted, leading to panic as banks stopped lending to each other. That was only the beginning of the panic in the markets. Worse was to come in 2008.

But did the Federal Reserve and the Treasury understand the full extent of the collapsing valuations? Their own valuations seemed to be too conservative. A relatively new index, the ABX group, provided a respected measure of the collapsing valuations in the subprime mortgage market. The ABX.HE family of indices are based on credit default swaps (CDS) written on US home equity loans (HEL MBS), tracking the price of credit default insurance on a basket of such deals. Declining risk appetite and rising concerns were a significant cause of the collapse in ABX prices from the summer of 2007 onwards. The ABX began 2007 at 153 basis points (bps), close to the historical average. By March, the spread was 552 bps, 669 bps by, 1,738 bps by the end of July and continued its steady rise throughout the second half of 2008 until it reached 9,000 by the end of the year. The asset-backed commercial paper (ABCP) market fell apart in the late summer of 2007. Investors expect to be able to access their funds on demand at par value, but even limited concerns about risk can give rise to a flight from the market. The ABCP market grew slightly in the first half of 2007 to almost $1.2 trillion, but fell by $190bn in August and then fell another $160bn during the rest of 2007, when the lack of any good news continued to drag the asset-backed markets and the financial institutions down.

It was not only the markets for MBSs that were affected in 2007. Asset-backed commercial paper (ABCP) contracted by some $350bn in the last five months of 2007. It is not entirely clear why this happened, although mortgage originators had used ABCP to bridge the financing gap between origination and securitization and the write-downs on mortgage-related assets made investors wary. The country was sliding into a recession, so assets depending on a firm's performance, such as credit card receivables, auto loans and leases, student loans, trade receivables and equipment loans and leases, were at risk as well. Between early 2005 and July 2007, the amount outstanding had doubled, reaching $1.2 trillion, and debtors extended the maturity of their borrowings so that investors had to wait for repayment. As the market collapsed, some conduits, special purpose vehicles usually set up by banks to purchase and hold financial assets by selling asset-backed commercial paper to investors, such as the money market mutual funds (MMMFs) were affected as well. Investors became increasingly unwilling to roll over ABCPs, especially at maturities of more than a few days. As the sponsors of the programmes, the banks, also provided liquidity, investors became increasingly worried that banks would be unable to support them, so they began to withdraw their funds from MMMFs invested in CP and turned to those only invested in US Treasuries. The investors were particularly spooked by an announcement by a large overseas bank that it could not value the ABCP held by some of its money market funds and, as a result, had suspended redemptions from those funds. Then the banks, in order to protect their liquidity and balance sheets, became less willing to lend to others, including other banks, thus exerting considerable pressures on both overnight and term interbank funding. On 10 August 2007, the Federal Reserve provided liquidity by temporary open market purchases, thus heading off that particular potential crisis. The Federal Reserve acted promptly, but in the role of a fire fighter: once that fire was put out, another would spring up, demanding attention and action. In fact, the fires were only smouldering, ready to burst into flames again at any moment.

The point here is that it might have been possible to save Lehman, if the SEC through its CSE programme had carried out its role in supervising the investment banks; if the Federal Reserve and the SEC had communicated about the state of Lehman, and if the Federal Reserve and the Treasury had been fully aware of the state of the markets and the implications for the value of Lehman's 'assets'. Some of the proposals outlined above might have worked a few months earlier, but by mid-2008, it was too late.

Even as late as August 2008, it was clear that Treasury and Federal Reserve officials had little knowledge of Lehman, and although they had a 'game plan', it was not clear that it could be activated on the basis of the information they then had. On 8 August, Parkinson set out the plan in an email to Steve Shafran:

1. Identify activities of the firm whose liquidation (Chapter 11) could have a significant effect on financial markets and the economy.
2. Gather additional information about those activities so as to assess more accurately the potential liquidation to have such an effect.
3. Then to identify actions that the firm, its counterparties or the government could take to mitigate the risk.
4. Most likely causes of systemic risk are tri-party repo borrowings and OTC derivatives. But are there other activities?
5. We have given considerable thought to what might be done to avoid a fire sale of tri-party repos but the risks are risks of moral hazard, Fed/taxpayer, but we are still at the early stages of assessing the potential systemic risk from the close-out of OTC derivatives.

He had also suggested that they should use an industry group to obtain more information about Lehman. This received a cool reception from Steve Shafran:

> My worry is that while this would make sense in a less stressed market, that the timing right now is problematic. If we ask, will we see anything in time to deal with some of the immediate issues that concern us?

Further emails from Patrick Parkinson to Steve Shafran and others on 19 August pointed out: 'We keep coming up against same quandary (lack of knowledge) . . . I still think it is worth engaging with the industry group'. Others who had met with Lehman advised that they 'had not really got much new information that will push the agenda forward'. He asked for a more detailed game plan. Parkinson forwarded Shafran's email to William Brodows, banking supervision officer at the New York Federal Reserve, who agreed that asking for an industry group would be 'less provocative' than gathering information from a single firm. Parkinson then forwarded Brodows' reply to Shafran, and Paulson eventually agreed to Parkinson's ideas on 28 August: 'Can confirm that his [Paulson's] preference is to do this in a way that minimizes disruption and concerns.'

It is clear from these emails that neither the Treasury nor the Federal Reserve had any idea of the size of the problems they were about to face. On 5 September, Parkinson circulated a draft letter requesting information from Lehman's CEO. Geithner would ask Gerald Corrigan, the former New York Federal Reserve President, who had co-chaired the Counterparty Risk Management Policy Group, to form an industry group to advise on the information required from a troubled investment bank. New York Federal officials were also 'very reluctant' to request copies of the master agreement that would shed light on Lehman's derivatives counterparties, because that request would send a 'huge negative signal'. All of these activities were wasted.

Geithner, Paulson and their officials went into September knowing little about the state of Lehman's finances and were ill-prepared to handle what happened in September. The FCIC report comments that, 'as they now realised, regulators did not know nearly enough about over-the-counter activities at Lehman and other investment banks'. Investment banks only disclosed the total number of OTC derivative contracts, the total exposure and their estimated market value, but not the terms of the contracts or the counterparties. 'There was no way of knowing who would be owed how much and when payments would have to be made.'[36] All of this means that bailing out Lehman would have been a far more costly exercise than Geithner and Paulson realized.

Was there any intention to bail-out Lehman?

Geithner argues that the Federal Reserve was unable to bail out Lehman. Even at the time, this claim seems difficult to believe, especially in the light of the AIG rescue on 16 September. In his book, Geithner states that, 'in the end, I am confident that the Fed would have helped finance a deal with a willing buyer . . . But the Fed assistance would not have diminished the risk to Barclays, much less the British requirement for a shareholder vote.' He adds,

> We had shown that we could push the boundaries of our authority to take some modest risk, but the Fed's emergency authorities limited how much risk we could take; we were the central bank of the United States and we weren't going to defy our own governing law to lend into a run.[37]

Giving testimony before the Financial Crisis Inquiry Commission on 2 September 2010, Bernanke, Chairman of the Federal Reserve, admitted that the decision to allow Lehman to fail had been taken for practical and legal reasons. According to Bernanke, the Federal Reserve was not allowed to lend without a reasonable expectation of repayment. The FCIC report also quotes from an email sent by Bernanke on the afternoon of Sunday 14 September 2008, in which he indicated to Governor Warsh that more that $12bn in capital assistance would have been required to prevent Lehman's failure. The email read: 'In case I am asked: how much capital injection would have been needed to LEH as a going concern? I gather $12bn or so from the private guys together with Fed liquidity support was not enough.'[38] What is odd about that email is that Bernanke seems to be so out of touch with what was happening.

Furthermore, the reference to the Federal Reserve's alleged lack of powers was not upheld by Chairman Bernanke when it came to his testimony to the FCIC, following testimony from a Fed official, who stated that it was only necessary for the Federal Reserve's Board of Governors to have adopted an appropriate resolution. There were other ways of preventing the collapse. The White House could have invoked the International Emergency Economic Powers Act 1977. It would have been possible for President Bush to have ordered whatever was required, such as guaranteeing Lehman's trades or financing the acquisition of Lehman's toxic assets.[39] Wide powers are granted to the President, provided the international emergency is international in scope and is also a threat to national security. Since President Bush gave full support to Hank Paulson, had he requested executive action, then it might well have been forthcoming. Such a request would have required Paulson and others to understand the international dimensions of the crisis, however, and it appears that they did not.

As the FCIC pointed out, this was quite different from the evidence Bernanke had given to the Senate Banking Committee in 2008. Then, he had said:

> The failure of Lehman posed risks. But the troubles at Lehman had been well known for some time, and investors clearly recognized – as evidenced, for example, by the high cost of insuring Lehman's debts in the market for credit default swaps – that the failure of the firm was a significant possibility. Thus we judged that investors and counterparties had had time to take precautionary measures.[40]

It is hard to see how that belief could have been sustained at the same time precisely as the extent of the troubles at AIG emerged over the weekend. If that was indeed the judgement made then, it was one that was not based on the realities of the situation at that time.[41]

What was said at the time of the rescue of Bear Stearns was even more relevant to the collapse of Lehman Brothers. Then Christopher Cox stated that the Fed's

> decision to provide funding for Bear Stearns through JP Morgan was made because – as you have heard Chairman Bernanke testify – Bear's extensive

> participation in a range of critical markets meant that a chaotic unwinding of its positions not only could have cast doubt on the stability of thousands of the firm's counterparties, but also created additional pressures well beyond the financial system through the real economy.[42]

The press release issued by the Board of Governors of the Federal Reserve System, regarding Bear Stearns, JP Morgan Chase and Maiden Lane LLC, set out the powers of the Federal Reserve in such situations, when the loan to Maiden Lane LLC was extended 'under the authority of Section 13(3) of the Federal Reserve Act, which permitted the Board in unusual and exigent circumstances, to authorize Reserve Banks to extend credit to individuals, partnerships and corporations.' The impact of allowing Bear Stearns to fail, as described by Christopher Cox, applied even more so to the impact of the collapse of Lehman.

Jim Wilkinson, chief of staff at the Treasury, emailed Michele Davis, assistant secretary for public affairs at the Treasury, on 9 September 2008 at 5.20 pm: 'We need to talk . . . I just can't stomach us bailing out Lehman. Will be horrible in the press don't u think?' Just some twenty minutes previously Paulson had convened a telephone call with Cox, Geithner, Bernanke and Treasury staff to 'deal with a possible Lehman bankruptcy'. The contents of the telephone call were not revealed at the time, but in his autobiography, Paulson said: 'Lehman has been hanging like a dead weight in the market.' They discussed ways to forestall a Lehman collapse. Geithner was still thinking in terms of the 1998 rescue of Long Term Capital Management. Doing something similar would involve getting Lewis, CEO of Bank of America, interested, allowing him to buy what he wanted and convincing an industry consortium to take on the remaining assets. 'Of course, the alternative, Lehman's demise was far worse.'[43]

On Thursday 11 September, Federal Reserve officials, including Jamie Anderson, circulated a document to Tobias Adrian, Beverly Hirtle and Michael Schussler, proposing that a representative group of Lehman counterparties and creditors should make plans in the event of a bankruptcy filing by Lehman. The purpose of the group was to reach agreement by the members of the group to hold off fully exercising their contractual rights to close out their trades with the defaulting counterparty. The document set out three possibilities for the weekend: first, a single institution taking over; second, a consortium taking over; and third, bankruptcy. It emphasized:

> unless we have credible bankruptcy plan our negotiating position, the subsidy in the liquidity consortium option will be weak. Consequently planning for bankruptcy will reduce some of the expected costs of bankruptcy and

> externalities imposed on the financial system as a whole, and make it a more viable alternative.

The group would also be required to review their options for agreement on netting offsetting agreements, reaching 'common valuations' for contracts post-bankruptcy.

This does not read as though it is a contingency plan, but rather as if it was designed to try and ensure the bankruptcy should go as smoothly as possible. The outcome was to be a public statement of the framework to which the members would have agreed, to be issued on the Sunday evening. The document also refers to the timing, stating that

> contingent on the anticipated bankruptcy filing by Lehman, on Friday evening, after the markets have closed, issue invitations to the chief risk officers of the member firms. The meeting would convene at 9 a.m. on Saturday at the FRBNY, and continue through to the Sunday evening.

Their only hope of avoiding bankruptcy was to find a buyer, but many of the officials involved realized that it was unlikely that a buyer would be found. A bail-out was not on the cards. On 10 September 2008, the Senior Vice President of the New York Federal Reserve, Patricia Mosser, wrote that the

> reputation cost of [another bail-out] is too high. If the Fed agrees to another equity investment, it signals that everything the Fed did in March in terms of temporary liquidity backstops is useless. Horrible precedent; in the long run MUCH worse than Option 3, bankruptcy, would be a mess on every level, but fixes the moral hazard problem.[44]

That was not the view of all the Federal Reserve Banks' officials, according to a recent article in the *New York Times:*

> [Some] believed that the government had the authority to throw Lehman Brothers a lifeline, even if the bank was nearly broke . . . we had lawyers joined at our hips, and they were very helpful at framing the issues. But they never said we couldn't do it . . . It was a policy and political decision, not a legal decision.

The article adds that members of the teams said that Lehman had considerable assets that were liquid and easy to value, such as US Treasury securities. The question was Lehman's illiquid assets – primarily a real estate portfolio that Lehman had recently valued at $50bn. By Lehman's account, the firm had a surplus of assets over liabilities of $28.4 bn. While the Fed team did not come up with a precise value for Lehman's illiquid assets, it provided a range that was far more generous in its valuations than the private sector had been.

> It appears that neither Geithner nor Paulson were informed about such research, with the suggestion in the article that they were both distracted by AIG. The legal position was clear that in 2008, the Federal Reserve Bank Act provided that 'in unusual and exigent circumstances' the FRB could lend to any institution as long as the loan was 'secured to the satisfaction of the Federal Reserve Bank' (Section 13–3). For the FRB that meant that a firm must be solvent and have adequate collateral to lend against it, and that was the responsibility of the NYFRB, some of whom thought that was the case. It is noteworthy that the legal argument only emerged later on October 7th after criticisms of the decision emerged that Chairman Bernanke stated that, Neither the Treasury nor the Federal Reserve had the authority to commit public money in that way.[45]

In his autobiography, Paulson made his position clear: 'Moral hazard is not something I take lightly ... I did not want to suggest that we were powerless. I could not say, for example, that we did not have the statutory authority to save Lehman-even though it was true.' If he had said that, then that would have been the end of Morgan Stanley, which was already under an assault that would dramatically intensify in the coming days.[46] He was repeating what he had said at a White House press conference on 15 September 2008, when he said that 'he never once considered it appropriate to put taxpayer money on the line in resolving Lehman Brothers'.[47] Michele Davis said that Henry Paulson and officials at the Treasury were consumed with trying to find a solution, but had little time to react without the necessary authority. 'You had this outpouring of stuff from the Hill of: No bail-outs, No government money, No nothing.'[48]

Later, Harvey Miller was to comment that 'Post the Bear Stearns bail-out, he was subjected to such criticism both from various Congressional personnel, from conservative groups, that he was scarred'.[49] It is interesting to note that, whereas a Parliamentary form of government involves the selection of Cabinet ministers from members of the ruling party, who have learnt to handle the political flak, this is much more difficult for Cabinet ministers who are drawn from senior business positions, but lacking political experience to take such hard public decisions.

It is worth noting also that analyses of the fateful weekend differ:

> Bankers involved said that they did not recall Paulson talking about Lehman's impaired collateral ... Buyers walked away for one reason: because they could not get the kind of government backing that facilitated the Bear Stearns deal.[50]

Paulson did, however, admit that he could have seen the subprime problem coming earlier, but that did not mean that he would have done anything differently. The kind of pressure he was under concerning 'moral hazard' is clear from an article in *Forbes* on 15 September 2008 in which Greenspan cautioned Washington against viewing the Fed as a 'magical piggy bank'. William Poole, former President of the Federal Reserve Bank of St Louis, regarded Lehman's failure and the forced sale of Merrill Lynch as a price worth paying: 'If there had been Federal Reserve money, the issue would have been raised immediately with AIG and Washington Mutual'. No doubt they were shattered by 16 September's announcement of the 'seizure' of AIG.

Tom Russo, General Counsel for Lehman Brothers, had 'a lengthy discussion with a room full of government officials during the Lehman weekend', trying to make it clear what the ramifications of letting Lehman go would be. His input clearly had little impact.[51] On 15 October 2008, Russo heard a speech given by Chairman Bernanke, who stated that Hank Paulson had

> never once considered that it was appropriate to put taxpayer's money on the line with . . . in resolving Lehman's Brothers' 'huge hole on its balance sheet' that he realized the inconsistencies in the statements made about the alleged lack of legal powers. He also referred to the Government's lack of legal power, but if Paulson had never considered such a move, how did concerns about legal power enter into the conversation?[52]

Russo then argued that most lawyers believed that

> any court would have deferred to the Federal Reserve on an interpretation of its statutory powers, especially given the unprecedented circumstances . . . The standard set forth in the applicable provision, Section 13(3) of the Federal Reserve Act, refers to 'unusual and exigent circumstances' . . . and the lending standard was 'secured to the satisfaction of the Federal Reserve Bank'.[53]

The lack of powers has been given by Geithner, Paulson and Bernanke as the reason for letting Lehman go, but this appears to be a post hoc view. At any rate, Russo argue, most bail-outs, that is, infusions of capital into institutions holding assets that are permanently valueless – are limited and rare. Most often what happened was that the Fed lent against assets that would ultimately pay off but that no one wanted to buy or lend at the time. 'With mark-to-market accounting, institutions had to treat those holdings as losses but the real problem was that they were not liquid, not that they didn't have value as a credit matter'. The reason given by the Federal Reserve and others was that Lehman had a 'capital hole' which he denied existed.[54]

Were the effects of allowing Lehman to fail known at the time?

No doubt with so many problems on their hands in September 2008, neither the Federal Reserve, including the Federal Open Market Committee and the New York Federal Reserve, nor the Treasury looked beyond the domestic scene at the global implications of allowing Lehman to fail. Even at that late stage, too many players failed to understand that the root of their problems was the nature and extent of subprime mortgages, even as foreclosures and delinquencies continued to rise and the markets failed to respond to the actions the Treasury and Federal Reserve had already taken.

Rita Proctor, assistant to the Chairman, provided him with an update on the state of the market to prepare him for a conference call on 11 September 2008. The report was gloomy enough, yet still did not set out the full extent of the damage that the collapse of Lehman would cause both nationally and internationally. The update stated that Lehman's share price had declined 45 per cent to $4 in the pre-open, and its CDS price widened 200 basis points to 775 as market participants voiced concern over the viability of Lehman as a going concern. Moody's also cited the market's 'crisis of confidence' concern with Lehman to suggest that ratings downgrades could come quickly unless there was swift progress to shoring up Lehman's capital base.

The report also indicated that if Lehman failed, it would be much more difficult to unwind their positions, since at the end of 2007, Lehman's net positions in derivatives were about $54 bn, or nearly twice as much as Bear Stearns. A worst-case scenario for Lehman Brothers would push more hedge funds towards their NAV (net asset value) triggers.[55] Although the email stated that

> funding from money funds [*sic*] are likely to be adversely impacted by a ratings downgrade [for Lehman]. We've spoken with several large money funds since Lehman's preannouncement and received somewhat mixed reports in terms of new shifts in providing funding to Lehman. Of the funds that we have spoken with thus far, all but one were continuing to roll overnight repo for steady amounts.

There was no warning that the damage done by the Lehman bankruptcy would actually 'break the buck' of a large money market fund, although the end of the email does refer to 'pressures in the funding markets'. The rest of the email is redacted.

The recently released full minutes of Federal Open Market Committee (FOMC) meetings suggest that in the early months of 2008, Federal Reserve officials did not seem to be aware that the country had already entered into recession, but at an emergency meeting, officials concluded that 'substantial additional policy easing in the near term might well be necessary'. Bernanke and Mrs Yellen took a more pessimistic view, which was not shared by all of their colleagues. Richard Fisher of Dallas had discussed the state of the economy with a cross-section of 30 CEOs in his district, and found that none of them 'see us going into recession.' A few days later, on 21 January, the Federal Reserve cut the benchmark interest rate by 75 basis points, the largest cut in over two decades.

By 30 January 2008, the FOMC cut the benchmark rate by a further 50 basis points, to 3 per cent. The accompanying statement read: 'financial markets remain under considerable stress, and credit has tightened further for some businesses and households.' Anxiety about inflation was a dominant theme in the discussions in the Committee, but then inflation is part of the Federal Reserve's mandate. Bernanke, four days after the rescue of Bear Stearns, commented that

> I think we are getting to the point where the Federal Reserve's tools, both its liquidity tools and its interest rate tools, are not by themselves sufficient to resolve our troubles. More help, more activity, from Congress and the Administration to address housing issues, for example, would be desirable.[56]

That help was not forthcoming until it was too late.

William Dudley, Vice President of the Markets Group at the New York Fed, gave his analysis of the Bear Stearns rescue, which was that 'an old fashioned bank run is what really led to Bear Stearn's demise . . . in this case, it was customers moving their business elsewhere and investors' unwillingness to roll over their collateralized loans to Bear'.[57] His description of the market turmoil suggests that he was well aware of the extent of the disruption in the markets. But Geithner's remarks after Bear Stearns are interesting: 'People who know this stuff quite well, who are reasonably calm people, say "This is possibly the worst financial crisis in 50 years, and the most challenging set of pressures facing the central bank in 20 or 30 years" . . . It is no surprise that we disagree.'[58] Earlier in the meeting, he said: 'The hardest thing in this balance now is to make sure that it's a backstop that's so attractive that they come.'[59]

The transcripts of the meetings of the FOMC convey the impression that the rescue of Bear Stearns, the opening of the Primary Dealer Credit Facility and a further cut in interest rates to 2 per cent indicate that members and officials considered that sufficient actions had been taken to arrest the crisis and stave off recession. The FOMC even predicted modest growth during the rest of 2008, and faster growth in 2009. The April meeting was dominated by concerns about inflation, due to a rise in the price of oil and other commodities.

At the June meeting, William Dudley refers to Lehman Brothers, reporting that its second quarter losses were larger than expected, but that its short-term financing counterparties 'have generally proved to be patient', with the PDCF encouraging them to keep their financing lines in place.[60] Other members were not quite so complacent. President Rosengren of the Federal Reserve Bank, Boston pointed out that

> [the] recent flurry of articles on Lehman before their announcement of their capital infusion highlights continued concerns about investment banks, despite our new liquidity facilities. As a result, I continue to view the downside risk of further financial shocks as being significant.[61]

A further shock came along quite quickly in July when it became clear that Fannie Mae and Freddie Mac were undercapitalized and soon required Paulson to announce emergency measures to prevent the disruption of the availability of mortgages to the market, and to stabilize the financial markets. To realize these objectives the Treasury would purchase equity in either of the two agencies. None of these proposals settled the market and by September, both Fannie Mae and Freddie Mac were taken into conservatorship.

The August meeting of the FOMC did not reflect the turmoil in the markets, but focused on the need to extend the liquidity provisions beyond the end of the year and to agree on how that should be done. The risk was of draining the Federal Reserve's balance sheet. Once again William Dudley spelt out the extent of the problems:

> The housing legislation [regarding Fannie Mae and Freddie Mac] raised the debt limit substantially. There is now about $1.2 trillion of headroom under the debt limit compared with only about $400bn previously . . . I wouldn't say I am confident that we could handle any eventuality – after all, the tri-party repo system provides trillions of dollars of funding to the primary dealers. In the unlikely event it all came to us, we wouldn't have the capacity to fully offset it at present. But we could accommodate hundreds of billions of dollars of demand if that proved to be necessary.[62]

It is perhaps against this background that Paulson's decision not to bail out Lehman should also be understood. At the 16 September FOMC, two members were very supportive of the decision. Mr Lacker:

> What we did with Lehman I obviously think is good. It has had an effect on market participants assessment of the likelihood of other firms getting support . . . We're likely to see a lot more disruption this week . . . but the silver lining to all the disruption . . . is that it will enhance the credibility of any commitment that we make in the future to be willing to let an institution fail.[63]

Mr Bullard said:

> My sense is that three large uncertainties looming over the economy have now been resolved – the GSEs and the fates of Lehman and Merrill Lynch. Of these, the resolution of the GSE uncertainty seems most pivotal. By denying funding to Lehman suitors, the Fed has began to re-establish the idea that markets should not expect help at a difficult juncture.[64]

Others, such as President Rosengren, were much more cautious:

> I think it's too soon to know whether what we did with Lehman is right . . . But we took a calculated bet. If we have a run on the money markets funds or if the nongovernment tri-party repo market shuts down, that bet may not look nearly so good.[65]

Mr Warsh took the view about the Lehman situation that

> no matter what judgement we made this past weekend about whether or not to provide official-sector money, it's not what's driving the markets. What's driving the broader uncertainty are questions about institutions like AIG that were rated AAA . . . If in a matter of weeks that AAA rating and that security turns out to be worthless, then firms will reduce their exposure and question the reliability of other insurance companies.[66]

But that caution was not shared by Chairman Bernanke. His lack of awareness of the global effects of allowing Lehman to fail is demonstrated in his testimony to the House Committee on Financial Services on 24 September 2008. Bernanke struggled to explain why AIG was rescued but not Lehman's:

> Whilst perhaps manageable in itself, Lehman's default was combined with the unexpectedly rapid collapse of AIG, which together contributed to the development last week of extraordinary turbulent conditions in global financial markets . . . These conditions caused equity prices to fall sharply, the cost of short-term credit – where available – to spike upward, and liquidity to dry up in many markets.[67]

The rescue of AIG took place on 16 September, and made a nonsense of Paulson's stand on moral hazard and no more government bail-outs. The Federal Reserve had known for months that the AIG had problems with its Financial Products division which had sold credit default swaps, insurance for CDOs, containing subprime mortgages, but had done nothing. The rescue of AIG, the insurance giant, at the initial cost of $85bn, took place because it was too large (with assets over $1 trillion), too global and too interconnected to fail. With Lehman's the focus was too narrowly on Wall Street, and ignored the international effects. After facing the international reaction to taking Fannie Mae and Freddie Mac into conservatorship, it seems odd that nothing of the sort was considered either before, during or immediately after the fateful weekend.

The impact of the collapse of Lehman Brothers

The failure of Lehman was widely reported. Media reporting varied from the dramatic to the pedestrian. From *The New York Times* (Dealbook): 'There will be blood: Call it the Weekend that Changed Wall Street', to the London *Financial Times*: 'Lehman Brothers files for Bankruptcy'.[68] Stock markets fell around the world, especially the Dow Jones, which fell by at least 504 points on fears that AIG would be next. The dollar fell against the yen, the euro, and the Swiss franc. UK and European central banks injected a total of $50bn into the financial system.

The bankruptcy of Lehman Brothers, the largest in American history, the fourth largest investment bank by asset size with over $600bn in assets and 25,000 employees, was at the very least the trigger for the ensuing financial crisis. Lenman's bankruptcy led to increased uncertainty, if not panic, and a wave of distressed selling of securities that caused a collapse in asset prices and a drying up of liquidity. This was immediately followed by the AIG collapse on 16 September 2008, the run on the Reserve Primary Fund on the same day, and difficulties in getting the Troubled Asset Relief Plan (TARP) approved by Congress over the following two weeks, which meant that the US Treasury and the Federal Reserve were tied in dealing with any other collapses of financial institutions.

The Financial Products Unit of the American International Group (AIG) was also affected by the collapse of Lehman, since it had written over $400bn of insurance contracts, credit default swaps which had to make payments when subprime mortgages suffered losses. As it seemed likely that AIG would have to make large payments under those contracts, AIG found it impossible to obtain short-term funding. On 16 September 2008, the Federal Reserve had to provide an $85bn loan to keep AIG afloat. The total loans to AIG eventually turned out to amount to over $170bn. This had come as a surprise to regulators and others discussing more effective regulation. However, it is not so surprising when it is recognized that insurance companies are still only regulated at state level, and under differing rules.

On the same day that AIG collapsed, there was a run on the Reserve Primary Fund, a large money market mutual fund. The fund held $785m. of Lehman paper, and when Lehman collapsed, the fund could no longer afford to redeem the shares at par value of $1, thus 'breaking the buck'. The fund lost 90 per cent of its assets.

Bruce Bent, the chairman and founder of the Fund, for a long time had resisted investing in commercial paper but had begun buying it in 2006, and from November 2007 had increased purchases of Lehman securities. The one-year return was 4 per cent above the comparable rate for securities. The Reserve Primary Fund was highly rated, triple AAA by Moody's and S&P, attracting individual and large institutional investors. Its assets reached nearly $63bn, but only about 1.2 per cent ($785m.) were in Lehman commercial paper and other securities. It became public knowledge that the Reserve Fund was exposed to Lehman's bankruptcy. The Fund

> was obliged to pay out $10.8bn in redemptions and faced about $28bn of further withdrawal requests. The run quickly spread to other money market funds with commercial paper, so that within a week institutional investors reduced their investments in money market funds by more than $172bn.[69]

The US Department of the Treasury announced a temporary deposit insurance covering all money market investments, which stopped the run immediately.

The bankruptcy of Lehman and other events of September 2008 greatly intensified the recession in the USA that had started in December 2007. GDP fell by 5.1 per cent between the fourth quarter of 2007 and the second quarter of 2009, but the last three months of 2008 to the first quarter of 2009 showed the largest drop in growth – an 8.9 per cent plunge in GDP, coinciding with the aftermath of the collapse of Lehman.[70] World economic growth fell at an annual rate of 6.4 per cent in the fourth quarter of 2008, worsening to a fall of 7.3 per cent in the first quarter of 2009. This is because a financial crisis widens credit spreads, increasing interest rates for household and business purchases, and so demand drops. The value of collateral also falls, making it harder to borrow. Banks begin the process of deleveraging, which also causes spending to fall, so the economy spirals downwards.

The collapse of Lehman also led to the destruction of trust between banks, which is essential if banks are to lend to each other. Banks could not assess the value of the assets which they all held, and hence were reluctant to take the risk of the borrower being unable to pay back a loan. What had happened to Lehman was a clear warning: the assets had lost value as a result of the accumulating defaults on mortgages and derivative products.

The financial crisis arising from Lehman's bankruptcy led to a significant decline in credit to the private sector, as well as to a sharp rise in interest rates. The failure of many US financial institutions led to the collapse of the equity markets in late 2008 and 2009, although the indices showed a recovery in 2010 as well as a slow down in international trade and industrial production. One of the main channels allowing the crisis to spread was the money markets. Following the bankruptcy, the short-term debt that Lehman had issued became virtually worthless, resulting in panic amongst the various investors and funds that held it. This led to a run on the money market funds which provided lending to the commercial paper market. This increased perceptions of default risk, leading to further panic in the global financial markets. Commercial banks cut back on lending, and central banks made concerted efforts to inject liquidity into the system. Letters of credit, and commercial paper to guarantee goods in transit, which gave trading partners the confidence that they would receive the money owed to them when goods reached their final destination, were no longer readily available. The credit markets froze. This was one of the reasons for the vast reduction in global trade. At the peak of the crisis, in early 2009, exports fell on a year-to year basis by 30 per cent in China and Germany, and by 37 per cent and 45 per cent in Singapore and Japan. The Lehman bankruptcy did not cause the financial crisis, but it was a significant trigger, leading to widespread fear that the global financial system was about to collapse, bringing financial ruin in its wake. It is only as 2009 wore on that fears gradually subsided. The costs of 'No bail-out' were far greater than Paulson, Bernanke and Geithner could ever have envisaged for a single moment. If they had been aware, as they should have been at the time, of at least some of the possible effects, then it is entirely possible that Lehman Brothers would have been rescued.