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In the News

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Bankruptcy or Bailouts

After a hectic week, it looks like a new rescue bill to help save money market funds and will contain some ban on short sales [1]. The costs for the new bailout are estimated to be between $500 billion and $1 trillion [2]. Moreover, there is no assurance this will be the end of the story. While some short trading will be addressed, regulating algos does not appear to be on the table. Such regulation could require transaction reporting to the SEC in real-time where they could be monitored for appropriateness; much like intrusion detection systems do for network security. One question is, how much will the Federal deficit be for this year and what Government programs will be cut back because of reduced funding? With the ever increasing and unanticipated expenses for bailing out banks, mortgage giants, and insurance companies; what will be left to secure the nation? When Bear Stearns started down the troubled path, the reason cited was a lack of liquidity following phony rumors. Indeed, we were told that Bear Sterns was too big to allow it to collapse as this would start a domino effect. Since then, the Government has taken over Fannie Mae and Freddie Mac. So how did the number 3 & 4 largest investment banks, Merrill Lynch and Lehman Brothers respectively, get into trouble? After all, the Fed now has $70 billion available for investment banks to borrow from [3]. The first bad news starting the week, Lehman Brothers filed for bankruptcy protection [4]. To head off the same fate as Lehman, the number 3 Investment Bank, Merrill Lynch will be purchased by Bank of America for approximately $50 billion [5]. There is a suggestion that the number 2 investment bank, Morgan Stanley, is in discussions to merge with Wachovia [6]. Of the five largest investment banks, this would leave only Goldman Sachs left. What is interesting is that there is no reason for these companies to be failing. As noted by Mr Mack (chief executive of Morgan Stanley): “There is no rational basis for the movement in our stock or credit default spreads…We’re in the midst of a market controlled by fear and rumors and short sellers are driving out stock down” [7]. This goes back to the algos (algorithms), computers programmed to trade based on news and other factors, without human intervention. Meanwhile, even the former Fed Chairman, Alan Greenspan, did not have a recommendation for dealing with Lehman Brothers and predicts more institutions will fail [8].

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Government IT Security

At least one Senator believes the OMB and agency OIGs FISMA compliance is limited to making sure the right documents were prepared [1]. Critics have argued before the Senate that FISMA compliance is not uniform [2]. The senate has a bill, S.3474, FISMA Act of 2008, that would strengthen the role of the Chief Information Security Officer (CISO) and establish a CISO council. The senate bill also includes a requirement for annual vulnerability testing and lists the DHS as a player in this effort. However, some critics argue that DHS has not done a good job in the area of cybersecurity [3].

With the meltdown on Wall Street, the importance of corporate American cannot be overlooked. One issue raised is that if Intelligence agencies learn of attacks against U.S. companies, alerting them could compro-

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Inside this issue:

Special points of interest:

- Largest $500 billion Government bailout of Money Funds
- Government $85 billion takeover of AIG
- Number 4 Investment Bank, Lehman Brothers files for bankruptcy
- Number 3 Investment Bank, Merrill Lynch, sold to Bank of America
- Regulators shutter Ameribank the 12th bank this year

Bankruptcy or Bailouts

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Lehman represents the largest bankruptcy in U.S. history [9]. If you owned stock in Merrill, you receive $29 per share. In contrast, Lehman stock was trading for under 20¢ per share. Companies that owned stock or loaned money to Lehman will be reporting more loss which could continue to fuel more bad news.

Stung by the market reaction from the Lehman Brothers bankruptcy, the Government reverted to the bailout approach. Most notably, the largest insurance company, AIG, was taken over in an estimated $85 billion bailout [10]. Additionally, there were indicators that the Government was looking for a buyer for Washington Mutual [11]. This at a time when the Federal Bank Insurance Fund is dwindling and might require Treasury borrowing should WaMu fail [12]. Additionally, the 12th bank closed by regulators, Americank, will cost the insurance fund an estimated $42 million [13]. Meanwhile, the Federal Reserve Bank of New York is making $87 billion financing available to help disruptions from Lehman [14].

CBS News has posited the question that must eventually be addressed; with a current Federal deficit of $9.634 trillion, who will bail out the U.S. Government? [15].

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2. Andrews, Edmund L., The New York Times, *Bush Officials Urge Swift Action on Rescue Powers*, September 19, 2008.
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6. White, Ben, and Sorkin, Andrew Ross, The New York Times, *Morgan Stanley Considers Merger With Wachovia*, September 17, 2008.
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9. Luhby, Tami, CNN Money, *WaMu shares hit hard*, September 15, 2008.
10. Son, Hugh, and Holm, Erik, Bloomberg, *Fed Takes Control of AIG With $85 Billion Bailout*, September 17, 2008.
11. Reuters, *U.S. regulators try to find WaMu buyer: report*, September 17, 2008.
12. Gordon, Marcy, AP, *Federal bank insurance fund dwindling*, September 16, 2008.
13. AP, *12 failed US banks, thrifts so far this year*, September 19, 2008.
14. Munroe, Tom, Reuters, *Fed rescues AIG, Barclays buys Lehman U.S. unit*, September 17, 2008.
15. Knoller, Mark, CBS News, *Who'll Bail Out Uncle Sam?*, September 17, 2008.

We live in a society exquisitely dependent on science and technology, in which hardly anyone knows anything about science and technology.— Carl Sagan

Government IT Security

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mised the intelligence gathering operation [4]. Following a different approach, the Pentagon this past spring launched its unclassified Minerva initiative to hunt for more information on the Chinese military [5]. Perhaps a better methodology is to assume the worse and build in protection that assumes attackers will get to your systems. Short of unplugging from the Internet (or other portal of entry such as a wireless access point), many companies might not know what to do. Especially if the attack is yet another zero-day exploit.

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2. Jackson, William, GCN, *Senate revisits FISMA*, March 13, 2008.
3. Condon, Stephanie, Cnet News, *Critics: Homeland Security unprepared for cyberthreats*, September 17, 2008.
4. Nakashima, Ellen, Washington Post, *Cyber Attack Data-Sharing Is Lacking, Congress Told*, September 19, 2008.
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Computer Reliance

Years ago, Congress passed the Securities Act and the Exchange Act to stop stock manipulation. Now 25—40 % of equities trades are made using algos [1]. Exchanges, such as the London Stock Exchange offer sub-millisecond trade services; targeting their top 10 customers that rely on algos [2]. So in a fraction of a second, stock prices can change rapidly. To see how the algos operate, consider that United Airlines dropped 73% within a 15 minute period when a outdated story circulated [3]. So there can be no question, the large trader algos search for news. During one trading day, Morgan Stanly and Goldman Sachs lost 24% and 14%, respectively on what is believed to be short selling [4]. Recognizing there is a serious problem, the SEC is considering requiring Hedge funds to disclose their short sales [5]. Then because Morgan Stanley's stock prices were falling, they were losing hedge-fund clients [6]. So the more bad news generated, the more the algos drive the stock prices down. For example, as Washington Mutual (WaMu) credit rating was lowered to junk status based on market conditions and not on the bank's financial condition [7]. We have seen the same story played out for other companies including AIG, Lehman Brothers, and Merrill Lynch. So large trader algos are driving companies under.

So what are the options? We could do nothing and hope it will get better. We could continue bailing out companies as they inch toward insolvency. Or perhaps we could update and enforce the laws we currently have. For example, consider the cost of continuous bailouts due to lack of information. The $700 billion streamline proposal the administration sent to Congress was a scant 2 1/2 pages [8]. One report indicates the automatic sell threshold for commercial paper was within 500 trades and this would likely have driven the market down 22% [9]. With inadequate information, there is little time for responding correctly. If large equity funds rely on computers to determine if a healthy company survives, perhaps it is time for an expanded role by the SEC to regulate algos. The SEC could operate its own algos to verify the conduct of programs used by large traders. By mirroring transactions to the SEC, the SEC could in near real-time determine if a large equity trader is behaving. New technology necessitates new regulatory tools. Another question is what security, if any, is applied to the algos that determine the financial safety and soundness of our financial system?

We have a tendency to place our trust in computers. However, computers are typically vulnerable to any number of exploits. Consider the ongoing California train accident investigation where a computer indicated the last signal before the collision displayed a red light [9]. In Los Angeles, another week, another train wreck; this time a slow moving light rail hit a bus [10]. In these extraordinary times, extra care must be exercised to verify the computer was not compromised. It is in effect the location for a single point failure.

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2. Flinders, Karl, Computer Weekly, *London Stock Exchange lures investment firms with sub-millisecond service*, September 2, 2008.
3. Smith, Aaron, CNN Money, *UAL ends lower after denying rumors*, September 8, 2008.
4. Time Business & Tech, *Morgan Stanley and Goldman Sachs Take Hit*, September 18, 2008.
5. Westbrook, Jesse, Bloomberg, *SEC May Require Disclosure of Hedge Funds' Short-Sale Positions*, September 18, 2008.
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8. Herszenhorn, David M., New York Times, *What the bailout plan would entail*, September 21, 2008.
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11. Moore, Solomon, The New York Times, *Collision of a Bus and a Light-Rail Train in Los Angeles Injures 15*, September 19, 2008.

In a few minutes a computer can make a mistake so great that it would have taken many men many months to equal it—Anonymous

Made in China

Readers may recall that last year, Chinese made pet food was laced with the chemical melamine to make it appear to be a protein rich product [1]. Many American pet owners lost their animals due to the toxic chemical. Now it seems this same chemical has found its way into the Chinese dairy industry. The chemically tainted milk recall was ordered by China only after the New Zealand Prime Minister, Helen Clark pressured Chinese government officials [2]. It is reported that corners were cut due to rapid growth [3]. With 6,000 sick babies so far, the "Made in China" label is being tarnished [4]. So far, tainted milk has been found in products from three of the major milk producers in China [5]. Malaysia, Singapore, and Japan ordered Chinese milk products pulled from their shelves [6].

What does this mean for the multiplicity of other Chinese goods consumed by Americans? Who will ensure the fine Made in China equipment used by the US Government is okay when there seems to be a problem keeping toxic chemicals out of the food supply?

With their newfound wealth from foreign trade, China is in a position to expand their influence. For example, one of the potential buyers of the second largest U.S. Investment Bank, Morgan Stanley, is the China Investment Corp [7]. It is suggested CIC would hold a 49% stake in Morgan [8].

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2. Wong, Gillian, AP, *China makes first arrests in tainted milk probe*, September 15, 2008.
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5. Wong, Gillian, AP, *China orders tainted milk products off shelves*, September 20, 2008.
6. Klamann, Edmund, Reuters, *China orders recalls as milk scandal widens*, September 20, 2008.
7. Reuters, *Morgan Stanley board to meet over weekend: report*, September 20, 2008.
8. Market Watch, *CIC in talks for 49% stake in Morgan Stanley: FT*, September 19, 2008.

From then on, when anything went wrong with a computer, we said it had bugs in it.—Grace Murray Hopper,

Crime

In Florida, seven people were charges in a $9 million foreign investment scheme [1]. Elsewhere in Florida , A person was charge in a $1.9 million property investment fraud scheme [2]. The FBI charged 112 people with obtaining passports using birth certificates for deceased people [3]. In this case, computer matching against a list of deceased people, identified the people that fraudulently obtained passports. In California, 18 people were arrested in a $33 million Medicare fraud scheme [4]. In Chicago, 21 were arrested in a multi-million dollar phony document scheme [5]. In Virginia, a man who obtained a fraudulent $3.9 million mortgage from the now bankrupt Lehman Brothers was sentenced [6]. We can't say how much loss on Wall Street can be attributed to crime, but at the very least, it certainly didn't help.

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Pennsylvania Bank Robber—FBI