

## **Time to “Drop the Hammer” on AIG’s Controls?**

A Case Study in Public Accounting and Auditing Post-SOX

Stephen V. Arbogast, Executive Professor

C.T. Bauer College of Business, University of Houston

### **Abstract**

This case is a tale of two organizations. On the one hand, it relates a story of financial control breakdown at AIG. Before the financial crisis this company wrote over \$300 billion in credit default swaps (CDS) on subprime mortgage securities. When it couldn't honor its commitments, counterparties like Goldman Sachs and Morgan Stanley faced insolvency. The U.S. government was compelled to intervene, bailing out AIG to the tune of more than \$100 billion. How did AIG, a once-AAA rated giant, come to such a pass? How did its senior management operate oblivious to the risks being taken on at AIG-Financial Products (FP)? This case provides that history, disclosing how the 'indispensable man' style of CEO Hank Greenberg fostered weak control systems. When Greenberg departed AIG, these weak systems failed to detect FP CEO Joseph Cassano's insensitivity to the collateral requirements and liquidity risks embedded in his massive CDS book.

This controls story is prelude to another issue – the role of Price Waterhouse Coopers (PWC) as AIG's auditor; engagement partner Tim Ryan has a tough call to make. There is history to consider. PWC failed to detect accounting fraud at AIG during Greenberg's tenure, for which it was fined almost \$100 M. Now PWC faces a different challenge. Under Sarbanes-Oxley (SOX), public accountants need to certify the adequacy of their clients' financial reporting control systems. Events have caused Ryan to doubt the robustness of AIG's controls. Should PWC now force AIG to admit a “material controls weakness?” Will doing so bring down the company?

The larger context here is the failure of CPA firms to prevent financial clients from filing fraudulent financial statements. SOX included several reforms aimed at fostering CPA integrity. The practice of doing auditing and consulting for the same client was curtailed. Auditor access to the Board Audit Committee was strengthened. Hiring and firing of the CPA was taken away from the CEO. Yet these changes, substantive though they were, did not prevent KPMG at Citigroup, Ernst & Young at Lehman Brothers, and KPMG again at Fannie Mae from signing off on their client's fraudulent financial statements. Why was this still happening? Have the SOX reforms been inadequate? Is there something about the financial industry which causes their outside audit firms to be too accommodative?

AIG's circumstances and the dilemmas it posed give students a chance to consider such questions; they further allow students to assess whether there is a path forward for Tim Ryan to discharge PWC's legal responsibilities while giving due regard for AIG's current plight. Finding that path begins with a factual determination of whether or not AIG has a “material controls weakness.”

### **Time to “Drop the Hammer” on AIG’s Controls?**

A Case Study in Public Accounting and Auditing Post-SOX

Stephen V. Arbogast, Executive Professor

C.T. Bauer College of Business, University of Houston

*“While no conclusions have been reached, we believe that these items together raise control concerns around risk management that could be a material weakness.” 1*

Tim Ryan, Price Waterhouse Cooper’s (PWC) global relationship partner on the AIG account, had spoken those words to AIG CEO Martin Sullivan on November 29, 2007. They were scary words for Sullivan to hear. If PWC eventually acted on its concerns, AIG would have to file an immediate 8-K notice of the controls weakness with the SEC. The global investment community would then have confirmation that AIG management couldn’t keep track of its business risks. Such news couldn’t come at a worse time. Since August, numerous banks, led by Goldman Sachs, had been bombarding AIG with demands for cash collateral. If these demands intensified, AIG could experience a severe liquidity squeeze.

It was now late January 2008. Tim Ryan’s concerns had not been allayed. If anything, his conviction that AIG was not on top of its risk positions had intensified. Despite Ryan’s November warning, top AIG executives told Wall Street analysts in December that:

*“...because this business [insuring sub-prime mortgage securities] is carefully underwritten and structured, we believe the probability that it will sustain an economic loss is close to zero.” 2*

In the same meeting, AIG’s executives also stated they could not provide a figure for potential losses from its sub-prime underwritings and investments. Since then, Ryan had looked at AIG’s preliminary year-end 2007 financials. The indicated result was staggering. AIG might end up reporting a full year loss on sub-prime exposure exceeding \$10 billion. 3 Should this figure hold up, the investment community would see it as fundamentally contradicting the assurances AIG provided in December. Ryan also thought it might raise awkward questions for PWC. One question would be: ‘How could PWC let AIG imply that no losses were likely, only to preside over a \$10 billion write-down two months later?’ A second would wonder: “Didn’t PWC miss similarly large AIG accounting issues as recently as 2005?” Critics and perhaps the Public Company Accounting Oversight Board (PCAOB) would be asking if PWC was even paying attention to AIG’s internal control processes.

Auditing control processes was not an inconsequential matter for audit firms. The 2002 Sarbanes-Oxley law (SOX) made it a clear requirement. The law required CEOs and CFOs to warrant annually that internal control systems were adequate. Public accounting firms were then charged with verifying that controls were sound. By issuing an unqualified opinion, audit firms were advising that they had checked on and agreed with management’s representation. If they did not agree, the auditor’s job under SOX was to require the client to declare a material

controls weakness. Auditors who failed to do so were subject to regulatory discipline. SOX had also established PCAOB, and given it powers to investigate, fine and even de-authorize negligent public accountants. Attachment 1 provides more details on SOX requirements for internal control systems and public auditing.

SOX adopted these provisions, in part, to strengthen the independence of auditing firms. Accounting scandals at Enron, WorldCom and others revealed that auditors had been intimidated and/or bought off. SOX sought to avoid future such episodes; it limited the types of consulting business that public accountants could undertake at firms they audited. SOX also required the rotation of audit engagement partners. By raising the accountability and liability of CEO/CFOs, SOX also sought to give them a more personal stake in sound reporting.

Directionally these changes helped, but did they go far enough? Auditing firms did sense more maneuvering room. However, SOX stopped short of changing some key conditions. All consulting business had not been prohibited. Clients were not forced to rotate auditing firms. The audit firms had lobbied fiercely on these issues. In succeeding, they preserved many of the dilemmas they faced with Enron and WorldCom. Client relationships were still lucrative over and above the auditing relationship. The audit relationship was also open-ended, implying revenues streams for the indefinite future. Such relationships were difficult to put at risk by taking a hard stance on a given accounting issue. Most important, the auditor's tool kit still consisted of a few weak leavers and one nuclear weapon. Auditors could raise questions. They could report to the Board Audit Committee. When push came to shove with a difficult client however, the choices remained stark ones. The auditor could bow to the client's wishes, or it could dig in its heels, forcing an admission of 'material weakness' or a financial restatement. In doing so it would probably blow up its lucrative, open-ended relationship. Exactly that outcome had happened to several accounting firms who took tough client stands post-SOX.

Watching AIG stumble around on its sub-prime mortgage exposures, Ryan felt these choices bearing down on PWC. The seriousness of moment added to problem. Financial markets were freezing up. AIG was being targeted by counterparties demanding cash and by short sellers hammering its stock. By forcing an admission of 'material weakness,' PWC would pour more fuel on the fires. Possibly, it could threaten AIG's financial viability. Did PWC want to be party to the dismantling of America's leading insurance company?

Tim Ryan had many questions to consider. For one, he had to decide if AIG's controls were materially weak on the merits? Ryan also needed to decide whether AIG's financial issues were PWC's problems. To whom did PWC owe primary allegiance? If allegiance went to the Board, shareholders, and the public, then management would have to deal with the consequences. . Ryan would then have to assess whether cratering the PWC-AIG relationship was a risk PWC had to take, and whether there were ways to mitigate it. In this calculus, he would also weigh PWC's reputational risk, potential litigation and PCOAB sanctions, if it did nothing.

Ryan decided first to accumulate all the evidence on AIG's controls weaknesses. Then he would consider AIG's plight, PWC business considerations, and what SOX and the PCOAB required.

## **Innovation & Controls, On Wall Street**

Ryan began by thinking he ought to compare AIG's controls systems with the best of its trading partners. If AIG was going to trade with J.P. Morgan and Goldman Sachs, it would need risk management that could stand up to business with such counterparties.

When most people think of J.P. Morgan, they think of a bank that makes loans. When they think of Goldman Sachs, they think of an investment bank that takes clients to capital markets and advises on merger deals. By the mid-1990s, if they looked deep inside the financials of each firm, they would have been very surprised. Both firms had evolved into something more akin to hedge funds with banking sidelines and giant balance sheets. By 1993, Morgan, the commercial bank, derived 75% of revenues from investment banking and trading.<sup>4</sup> Around the same time, trading revenues well outstripped investment banking fees at Goldman.

Several trends spurred these evolutions. For one, core franchises at both commercial and investment banks had "commoditized." There was now little to differentiate the loans made by Morgan from those made by Citibank or UBS. Goldman's ability to provide a capital market execution was not much different than Morgan Stanley's or Merrill Lynch's. Consequently fees, spread, and margins on such transactions had eroded. Starting in the 1980s, banking leaders set off in search of new, more lucrative endeavors.

Their efforts fostered a dramatic era in financial products innovation. Throughout the 1980's and into the 1990's, Wall Street's banks produced one new product after another – leading to new markets in currency and interest rate swaps, junk bonds, asset backed securities and collateralized mortgage obligations. Bankers combined bonds and swaps to produce "synthetic commercial paper." Auction rate preferred stock was developed to give banks "permanent capital" with a cost approximating commercial paper. Last but not least, the Credit Default Swap (CDS) was developed to allow lenders to sell off credit risk on specific debts.

This tidal wave of innovation generated fees, but also produced a second revenue effect. Innovators and their competitors discovered that the new instruments made perfect trading vehicles. Both new and complex, the instruments were hard for markets to value. This gave the innovators and their quantitatively adept imitators' information and trading advantages. New securities often were traded in thin markets; this brought into play a range of classic trading strategies: ramping prices, front running with news and squeezing weaker players caught on the wrong side of price movements. These trading opportunities soon saw the most skillful players reaping immense profits. In 1993, Goldman made its largest profit ever, \$2.7 billion pre-tax. More than 50% came from proprietary trading.<sup>5</sup>

Trading, however, is a zero sum game. For every winner there is a loser, and it is difficult for any player to win consistently; even the best traders hit cold streaks. Goldman found this out with a vengeance, as it began to lose \$100s of million from misplaced trades during 1994.<sup>6</sup>

As a result of such experiences, the better managed banks revisited the question of suitable risk management systems for their new trading activities. Trading was not a new activity. Basic control principles and frameworks already existed. The question now was how to adapt and develop those controls in light of trading's enhanced size and importance.

The most basic control principle was simply to limit the capital allocated to trading. Such limitations contained the position sizes traders could "put on," limiting potential for losses. Capital limits were applied on multiple levels. Individual traders had limits. So did their major groups, e.g. currencies, convertible securities, distressed debt, etc. By themselves however, capital controls had not proved to be adequate for managing trading risks. Traders by nature believe in their "views." Inevitably, they press for more capital to bet. Inevitably, the more successful of them get larger allocations. Total capital allocations, thus, tend to ratchet up over time, unless/until some disastrous bet sends the process spiraling in reverse.

To avoid boom/bust trading cycles, Wall Street firms, typically, use a second control, the "stop loss" to complement capital limits. Stop losses require traders to unwind trades if their positions hit a pre-determined loss figure. As an example, consider a \$10 M "long" position in Ford stock. Applying a stop loss might require the stock to be sold if prices decline such that the position is \$200,000 "underwater." Such stop loss controls force traders to rethink their strategies and reposition at better prices while also keeping losses in bounds. Stop loss controls operate under an important accounting convention, "mark-to-market." Under these rules, banks reflect new market prices for securities on their books at the close of each day. Doing so allows for a daily assessment of gains/losses by trading position. Those positions which have hit their stop loss are then slated for unwinding during subsequent trading.

Traders generally dislike 'stop loss' controls. Most believe in their trades, and favor giving them time to prove correct. Many times they will react to unfavorable price movements by wanting to increase the bet, known as "doubling down." For traders, stop loss controls can mean the worst of both worlds – their trade goes down in the books as a loser, even if the trader's strategy is eventually shown to be sound.

To move beyond the constant battles with individual traders about capital and stop losses, financial institutions found it useful to aggregate and manage risk on a firm-wide basis. This allows a powerful risk management committee to look across all sectors and decide how much risk appetite it has by sector. Thus, a given institution can decide to increase risk in oil and gold commodities, while cutting back in European sovereign debt. Sector limits are set, and group managers derive capital and stop loss limits for their sub-groups and traders. This approach tends to curtail some of the arguments at the trading desk level. Decisions come down from on high. To reverse them, traders must arm their managers with compelling reasons to go back up the management chain. In the meantime, controls are in place and they stick.

To practice aggregate risk management, financial firms need both good information systems and a conceptual framework that permits "apples to apples" comparisons across different financial products. Not all financial products display equal price sensitivity. Some, like equity

warrants, may show a 5% price response to a 1% move in the underlying stock. The advent of “derivative” securities brought more of the same. Instruments like options and exchange traded indexes reference underlying securities. However, their prices also are sensitive to other factors, i.e. the large potential payoff relative to capital at risk, and in the case of options to the limited time for exercising before expiration. Such factors make derivative prices much more volatile than whatever asset is being referenced. Some way had to be found to compare such outsized gain/loss potential with that of more standard securities.

J.P. Morgan developed a way to do so during the early 1990s. Dubbed “Value at Risk (VAR),” it measured the firm’s potential for loss on all holdings during the approaching 24 hour period. VAR asked a simple question – assuming “normal” trading markets and a 95% confidence level, what was the maximum that the firm could lose during the next trading day? 7 “Normal” trading markets was rubric for statistical price data capturing 95% of the historic daily price volatility for all relevant trading. Price movement way up or down, representing 2.5% of outcomes in either direction, were excluded from consideration. The analysis then took the worst price case within the 95% confidence band, applied it to the firm’s holdings, and computed aggregate potential losses by sector and for the firm.

VAR, as described has many attractions. For one, it permits an “apples to apples” comparison across trading positions whose nature and behavior differed greatly. VAR also gives risk managers a convenient tool to spot risk concentrations, “hot spots” where the firm’s exposure to loss might exceed management’s appetite. VAR is easy to understand, and hard to discredit as useful information.

However, VAR has its limits. For one thing, it ignores the “fat tail” risks, i.e. how securities would perform under stressful conditions (the missing 5%). Treasury securities, for example, could be expected to perform quite differently in very bad conditions relative to junk bonds. For another, VAR only looks at the next 24 hours. Risk managers sometimes need to look at exposures to distressing trends. Markets develop their own momentum. Bad price trends can persist, even “overshoot” fundamentals. Liquidity squeezes can intensify price declines. Smart risk management needs to spot bad trends, cut positions and take losses as early as possible.

Bearing this in mind, the best risk management firms, J.P. Morgan and Goldman Sachs, didn’t content themselves with daily VAR. Their risk managers subject firm-wide positions to stress tests and scenarios. Often they test for the potential “Black Swan” events – those occurrences which had no place in recent historical statistics but which might comprise a new event that could upend carefully calibrated trading positions. Some remembered the lessons of Long Term Capital Management (LTCM). A giant hedge fund run by several Nobel prize-winning economists, LTCM was brought to its knees by unexpected events. LTCM had numerous long positions in various bonds and derivatives when Russia defaulted on its sovereign debts in 1998. No sovereign government had defaulted since the early 1980s. Prices then plummeted on LTCM’s positions; collateral calls came from counterparties and financing dried up. LTCM couldn’t sell assets fast enough to avoid insolvency. Only a rescue organized by the New York Federal Reserve Bank saved it from bankruptcy and liquidation.

The LTCM story reminded those inclined to pay attention that three other controls are foundational to trading risk management. Firms need to keep an adequate capital base relative to their aggregate trading positions. This is known as maintaining a sound leverage ratio. Commercial banks typically limited leverage to 10:1, i.e. a dollar of capital behind every \$10 of assets. Prudent investment banks might double that ratio. Second, firms need to be careful about mismatching the duration of assets and financing. Borrowing “overnight” to buy 30 year bonds involves risk. If financing for any reason cannot be rolled over, the firm’s only recourse will be to sell the long bond. Typically, firms experiencing such stress are quickly spotted and punished by other traders. Finally, not all assets held by financial firms are marked to market. Some, like bridge loans to acquirers don’t trade regularly. Such assets might typically be carried at historical cost. Depending upon their risk, firms might beneficially reserve capital against potential future losses on these assets.

Above all else, sound financial control requires top management support for the risk managers. Traders uniformly chafe under restraints. They also enjoy strong financial incentives to bet and win big in the next bonus cycle. Given half a chance, traders will run around or roll over the most well architected controls structure. Only the knowledge that risk management has the ear and support of top management will restrain their efforts to dismantle the constraints.

With this history in mind, Tim Ryan turned his attention to the control structure within AIG. His focus, in particular, settled on a part of AIG that was far from its core insurance business – AIG Financial Products (AIG-FP).

### **Management and Controls at AIG**

Tim Ryan only ascended to the Global Relationship Partner role after the departure of AIG’s legendary leader, Maurice (Hank) Greenberg. He had heard the stories, however. Greenberg had built AIG from nothing into the dominant player in the insurance industry. He also, it was said, carried AIG’s strategy, positions, and risk management around in his head.

Greenberg had taken a little known insurance firm founded in Shanghai and in a matter of decades transformed it into the indispensable player in the industry. Greenberg was innovative and relentless. Where other insurance firms were conservative, content to stay in their niche, Greenberg made AIG the cutting edge for new types of insurance. He pioneered writing cover for political risk. Greenberg also originated cover for the liabilities of corporate directors and officers. <sup>7</sup> He pushed AIG aggressively into foreign markets, forming subsidiaries one after another to cover more and more jurisdictions. The firm became a giant in reinsurance, the practice of taking on part of the exposure written by a primary underwriter. Greenberg always maintained a keen eye for risk and sound underwriting. Important rewards followed. AIG acquired a coveted AAA credit rating. This meant a low cost of capital and fattened the margins on the coverages AIG wrote. By 2000, AIG was recognized as the uncontested leader of the insurance industry. Attachment 2 provides a summary of AIG’s financial results, 2000-2003.

Part of Greenberg's success came from fostering diversification. Gradually AIG acquired a number of well-performing non-insurance businesses, e.g. aircraft leasing. In 1987, Greenberg launched another diversification, this one into financial products. AIG-FP, as it would soon be known, was originally led by Howard Sosin, a Drexel Burnham banker with a proprietary approach to trading interest rate and currency swaps. 8 Sosin's FP quickly made a lot of money, then saw some of its trades go sour. Greenberg forced Sosin's departure in 1993, turning the business over to Thomas Savage and FP's CFO Joseph Cassano. Both FP and Cassano would be heard from again.

Greenberg's drive and domination of AIG led to an idiosyncratic management system. On the one hand, AIG was immense and complicated. It had many business units operating in hundreds of jurisdictions using thousands of subsidiaries. The insurance business was also heavily regulated. Each jurisdiction had its own rules, specific protections designed to insure that policyholders got valid claims paid. All of this made AIG bureaucratic and legally driven within individual business units. From another perspective, AIG's management system best resembled a collection of silos. Almost all communication was "up/down." Greenberg had little interest in training a successor and even less in encouraging peers or rivals to emerge. Consequently, he maintained nearly 30 direct reports. 9 Business unit heads talked to Greenberg, but seldom to each other. Firm-wide perspective was not encouraged or developed. Greenberg also chaired weekly risk committee meetings at which he personally reviewed exposures directly with business unit heads. He kept on top of all risks and gave frequent directions to adjust positions.

Greenberg's management style had important consequences for the firm. To the outsider, AIG looked like a giant success story crafted by a brilliant, driven leader. Inside the firm, other issues were visible. Because he preferred to get information directly from business unit heads, Greenberg also saw little reason to invest in expensive management information systems. Consequently, by 2000 AIG's internal systems were seriously antiquated. Risk management was, thus, critically dependent on Greenberg's weekly meetings and his own keen eyes.

Greenberg's "indispensable man" style also led him to delay development of a serious succession plan. Right up to 2005, Greenberg made it clear he had no plans to leave. This became so apparent that two of his sons departed AIG to run lesser insurance firms. 10 All of this meant that AIG was carrying considerable "what if Greenberg gets hit by a bus?" risk.

The third issue was harder to spot – AIG's parent holding company was, in fact, a hollow giant. It carried a AAA rating, but had few financial resources of its own. Rather, it depended upon distributions from its many subsidiaries. Since most of these were highly-regulated insurance businesses, it was unclear how much internal cash AIG parent could muster in a crisis. For the present that risk was muted by AIG's continued reports of growing profits and cash flow. Only someone like Hank Greenberg, with an intimate knowledge of the firm's internal landscape could project how the AIG parent might rally to meet a liquidity crisis.

A final controls issue took shape at AIG-FP and was late in developing. Starting around 2004, FP began writing CDS protection. In doing so, AIG-FP guaranteed a counterparty, usually a bank, against the risk of default on designated loans. The CDS contracts specifically had AIG promising to compensate the bank for all losses above loan recovery value; in return AIG received annual fees during the life, typically 5 years, of the CDS. Banks liked to buy CDS protection from AIG; doing so brought “capital relief” allowing them to make new loans. In AAA-rated AIG, they also had a counterparty able to pay out loss reimbursements. AIG-FP also liked the business. Fees more than compensated for losses, and loss payouts were often long delayed by restructuring and recovery efforts. CDS was good business.

Joseph Cassano, now in charge at FP, saw possibilities to grow the CDS business. Wall Street firms brought FP other opportunities to write credit protection – on asset backed securities and leveraged loans. Among these opportunities was the chance to write protection on subprime Residential Mortgage Backed Securities (RMBS) and the Collateralized Debt Obligations (CDOs) constructed from such securities. Cassano and FP waded cautiously into the subprime CDS business. They decided to concentrate their activity in the AAA and “super-senior” tranches of such securities. 11 These instruments were regarded by Moody’s, S&P, and Fitch, as the credit equivalent of “risk free” U.S. Treasury securities. AIG-FP’s internal models calculated a 99.85% probability that the firm would never have to pay any claims on its CDS exposures. 12 To Cassano, this made the subprime CDS business look like free money. In return for writing protection on a virtually risk free security, AIG would get a stream of annual fees.

Cassano, thus, decided that no reserves for losses should be set aside for this business. At first, this looked like a great bet. FP’s combination of growing subprime CDS fees and no loss reserves made for contributions to AIG’s bottom line that approached \$1 billion. 13

As 2004 went into the books, events began to unfold that would expose AIG’s less than robust management system. These began when Hank Greenberg “got hit by a bus.” The same bus also ran over AIG’s auditor, Price Waterhouse, and brought Tim Ryan onto the account.

### **Greenberg takes a fall for AIG’s “cooked books”**

Another thing about Hank Greenberg’s management style was that he liked to keep Wall Street happy by cranking out 15% annual profit growth. AIG did this with amazing regularity and little variance. When asked how this was possible, Greenberg would give his questioner a penetrating look and inquire: “What do you want? Do you want steady growth? Or do you want up 60 percent one quarter and down 15 percent the next?” 14 Since few Wall Street analysts could penetrate deep into AIG’s labyrinth of subsidiaries, most assumed the firm’s performance was some combination of Greenberg’s continuing genius with a little bit of financial statement massaging to round off the edges.

The truth turned out to be more disturbing. Starting in 2004, New York Attorney General Eliot Spitzer began investigating the insurance industry. His inquiries soon turned up a series of AIG

transactions having no purpose other than to affect reported reserves and financial results. In one instance, Greenberg had created a Barbados subsidiary to hold the AIG stock used to compensate top executives. Greenberg had this entity enter into transactions with AIG over 15 years that allowed profits to be shifted from one year to another. AIG had also entered into similar types of transactions with Berkshire Hathaway General Re firm – deals with no economic purpose other than generating higher accounting reserves for AIG. Spitzer moved to prosecute AIG for securities law violations. In effect he charged AIG with misleading investors about the true nature of reported profits and equity. 15

A special committee of AIG's Board launched an investigation. PW was brought in to review the books. One AIG executive later recounted: "They were finding problems everywhere" – e.g. derivatives accounting, reinsurance transactions, all deals PW had once certified. 16 PW eventually told the Board it could not certify AIG's books if Greenberg stayed as CEO.

The AIG Board looked for a way to settle. Spitzer told the directors that there could be no settlement without Greenberg stepping down. Faced with Spitzer's ultimatum and PW's verdict, the Board agreed. Greenberg stepped down in February, 2005. Martin Sullivan, a long-time insurance executive, succeeded him as CEO. AIG would eventually pay a \$1.6 billion fine to New York State. It also restated earnings for 2000-05, lowering them by \$3.4 billion. 17 Another piece of fallout came from the rating agency, S&P. In May 2005 it downgraded AIG to AA+. S&P instituted the downgrade more in response to the accounting scandal and Greenberg's departure than any particular decline in AIG's financial fortunes. 18

These events raised obvious questions about AIG's auditor, Price Waterhouse (PW). Where were PW's auditors when Greenberg was concocting his fictitious transactions? How could PW have missed such behavior and certified AIG financial reports? AIG's shareholders were outraged. Eventually the Ohio Public Employees Retirement System would sue PW in Delaware's Chancery Court. In part to defend itself against such litigation, PW had undertaken the huge investigation of AIG's financial reporting and controls. AIG-FP was included in their audit. PW also changed up its account team, putting Tim Ryan into the Global Relationship role with Mike McClogan as the Engagement Partner. 19 Such efforts did not prevent the Ohio Employees' suit against PW from being expensive. Eventually, PW paid out \$97.5 million to dispose of the case. 20 AIG did, however, continue to keep PW in the audit role.

As these events unfolded, FP continued to pile up subprime CDS exposure. Some voices within FP began to raise concerns. Gene Park and Andrew Forster spotted deteriorating underwriting standards in the mortgage market. Did these signals warrant any change in direction? Here is where AIG would miss Greenberg's presence in risk management. Greenberg knew about FP's CDS exposures. 21 Sullivan, however, knew nothing of FP's business and showed little interest in learning. Shortly after taking over, Sullivan cancelled Greenberg's recurring risk management meetings. PW was consumed with restating AIG's books.

Cassano realized, and was glad, that FP would make the CDS exposure decision on its own.

### **AIG-FP confronts a subprime Market Decline**

As 2005 neared a close, Cassano decided to heed the Parks and Forster's counsels of caution. He decided to cap AIG's exposure. FP told its counterparties it would no longer write CDS protection on subprime mortgage instruments. In calling a halt when he did, Cassano capped AIG's CDS exposure at \$110 billion. <sup>22</sup> He did, however, ignore two risks embedded in this exposure. FP's CDS contracts had what are known as "collateral triggers." Most of these clauses required AIG to deliver cash collateral to their CDS counterparty if: 1) AIG was downgraded below AA-; 2) the insured securities were downgraded; or 3) prices of the insured debt security fell below some designated level, e.g. 92% of par. <sup>23</sup> Cassano and FP considered all such events highly unlikely. AIG was rated still rated AA+; dropping below AA would require a three stage downgrade (through AA to A+). The securities being insured were also rated AAA, which also minimized any price volatility related to credit.

It was important that FP not face many collateral triggers because of a second risk. FP did not have many financial resources of its own. FP lacked operating businesses and hard assets. Moreover, if it needed support, FP could only look to the AIG parent; FP had no call on or access to the capital retained within AIG's insurance businesses. So long as AIG parent retained its AA, this would not be a problem. FP could borrow externally using the parent's, or have the parent borrow and funnel funds over to it.

Still, if AIG parent was something of a hollow giant, FP could only be considered more so. At the beginning of 2006, FP had a huge balance sheet by any measure. Embedded within that balance sheet were exposures that could produce sudden demands for large amounts of cash. For the moment, those contingencies seemed remote. Cassano never discussed them with Sullivan, and no attempt was made to quantify the potential demands for sudden liquidity that might appear. PW was aware of the CDS collateral triggers, but took comfort for the moment in AIG's credit rating and the high apparent quality of what FP had insured. <sup>24</sup>

Events during the rest of 2006 and the first half of 2007 were about to shatter all sense of comfort.

### **FP faces collateral calls on Subprime CDS**

Throughout 2006 the subprime mortgage market displayed progressively stronger symptoms of "topping" and decay. Underwriting standards hit new lows. "No doc" and negative amortization mortgages made up a higher percentage of new "vintage 2006" mortgages. Housing prices peaked and began to decline in formerly hot markets. Mortgage delinquencies rose rapidly; especially concerning were the increasing number of "early payment defaults," where mortgagees failed after making only a few, or even no monthly payments.

Prices of subprime mortgage securities began to slip in sympathy with underlying fundamentals. Initially, RMBS and CDO prices fell only 1-2 points. Yet, this decline started to

destabilize certain players. Two Bear Stearns hedge funds heavily invested in subprime securities reported their first monthly loss for February 2007. Within a couple of months the funds faced a run of investors towards the exits. By July, they had shut down entirely.

July also saw the Rating Agencies begin to downgrade scores of subprime mortgage securities. Their market prices again fell on the news. Most Wall Street firms continued to maintain price “marks” in the mid-90s. Those marks were theoretical; actual trades in the referenced securities had virtually ceased to occur. Noting this and sitting on a “big short” position, Goldman Sachs marked down its securities holdings much more severely. Whereas Merrill Lynch might hold a subprime security’s value at 95, Goldman would insist its real value was 80 or even lower. When a counterparty protested, Goldman would offer to sell them securities priced at the level of Goldman’s marks. There were no takers.

During the first half of 2007, Goldman began to discuss possible collateral calls with FP. Whether this reflected genuine worry about AIG-FP’s ability to perform or a conscious strategy to spread panic that would cause its “big short” to prosper is unclear. What is clear is that in July, Goldman looked at its \$20 billion in CDS contracts with AIG. Noting the collateral triggers and its own price marks, on July 26 Goldman sent AIG-FP a demand for \$1.8 billion in cash collateral. <sup>25</sup> FP and Cassano were stunned. No other Street firm was carrying Goldman’s price marks or asking for cash. AIG resisted Goldman’s demands for weeks before reluctantly handing over \$450 million as a “good faith” effort on August 10. <sup>26</sup> News of Goldman’s demands reached PW and Ryan. For the moment, they accepted Cassano’s interpretation that this was just “Goldman being Goldman,” attempting to impose terms on AIG that were out of line with the rest of Wall Street.

Unbeknown to Cassano, conversations were taking place between PW and Goldman. PW was also Goldman’s auditor. As the disputes with AIG continued, Goldman executives began to question their PW partner. In essence they asked: “How could the same auditor certify accounts at two different clients based upon widely different values for the same securities.” Goldman’s PW partner promised to take up the valuation question with headquarters. <sup>27</sup>

Fall 2007 brought AIG no respite. The Rating Agencies continued to downgrade subprime mortgage securities. Trading in such instruments was almost non-existent. Banks, however, still had to price their securities each day. With credit ratings in free fall, there was no avoiding lowering the carrying prices. Goldman continued to be the most aggressive in lowering its marks. Some of its prices were now down to 60% of par value. This intensified Goldman’s calls for AIG to post collateral on their CDSs. By late November, other firms have joined Goldman in requesting collateral. Total cash demands from all counterparties were now north of \$6 billion. <sup>28</sup> AIG-FP’s capacity to meet such demands was questionable. FP argued, delayed, made partial payments of less than \$2 billion, and ultimately turned to AIG’s parent for help.

Matters came to a head on November 29. Cassano was on a phone call with CEO Martin Sullivan. Tim Ryan was listening in. Cassano informed Sullivan that FP had paid out almost \$2 billion in collateral to Goldman and others. It quickly became apparent that FP had made this

decision without informing anyone at AIG's parent. Sullivan then asked about the potential profit impact of declining market prices on FP's CDS exposure. Cassano responded that if FP agreed to Goldman's marks, a "worst case" scenario, the negative impact on AIG's 4<sup>th</sup> quarter earnings could reach \$5 billion. A startled Sullivan later commented that the news almost gave him a heart attack. 29

It was shortly after this phone call that Ryan informed Sullivan of the possibility that PW might issue a finding of a "material controls weakness."

### **Ryan and PW approach a Decision**

Ryan's warning initiated a process of intensified interaction between PW and AIG-FP. In January 2008, AIG Chairman Robert Willumstad called PW to a secret meeting, and asked it to review FP's operations in detail. The findings were not comforting. 30

For starters, FP's CDS contracts were quite clear. AIG owed cash collateral if the insured securities' prices fell below designated thresholds. By any measure, prices were now "underwater" on a large number of insured securities. Cassano's argument that the securities in question were likely to pay off over time was irrelevant to the risks AIG now faced. FP's exposure to collateral calls was enormous. Subprime prices were likely to continue to fall. Marks at other Street firms would draw closer to Goldman's. FP didn't have any good estimates of the ultimate potential cash call, but PW could see it reaching \$10 billion or more. Where would FP, or for that matter, AIG find that kind of cash?

Ryan had also concluded that FP's marks were going to have to come down for the CDS portfolio. PW found FP's valuation models to be grossly flawed. That Cassano believed the insured securities would ultimately pay out 100% was irrelevant. Market uncertainties and illiquidity had dropped the market prices to Goldman-like levels. Under mark-to-market accounting, that had to be reflected in reported profits. Cassano tried to argue in favor of an alternative approach, one Ryan told him "had no basis in accounting rules." The net results of the portfolio revaluation would drop reported 2007 earnings by the \$5 billion Cassano had earlier described as a "worst case" scenario. 31

Elsewhere in AIG other storms were brewing. AIG had a wealth management business of considerable size. This business involved custody of stocks and bonds owned by clients. As a side business, AIG would lend such securities out to "short sellers" who would post some cash collateral as security. Sound practice called for the lending firm to invest such cash in secure, short term instruments. These could be easily liquidated and the cash returned to the short seller when the lent securities were returned. With interest rates low, however, AIG had decided to invest a portion of these security deposits in subprime mortgage securities. Those securities were now worth considerably less than par. Moreover, they could not be easily sold to recover cash. Indeed, trying to force a sale of any size would only send prices plummeting to fire sale levels. AIG was thus exposed to billions more in calls for cash that it could not readily

provide. Potential funding requirements ranged as high as \$73 billion, depending upon when short sellers returned securities. As 2007 closed, AIG actually owed \$6.7 billion in cash to investors who had returned their borrowed securities. 32

Perhaps, even more disturbing to Tim Ryan was the fact that AIG's securities lending business made its decision to begin purchasing subprime mortgage instruments at about the same time that Cassano and FP decided to cease writing CDS protection on similar securities.

As January merged into February, Ryan began to take stock of where AIG stood on managing its risks associated with subprime derivative instruments. Sullivan and colleagues, it seemed, were still struggling to get accurate information out of AIG-FP. Ryan added these observations to certain other facts, coming up with a list of possible justifications for a finding of a "material controls weakness." The items on this list, in order of priority, were:

1. AIG FP lacked reliable valuation models for estimating prices on its huge derivatives portfolio, and thus could not reliably inform AIG parent as to its P/L performance.
2. FP had neither established reporting processes for aggregating its subprime derivatives exposure, nor for reporting such exposures to AIG parent
3. FP had neither a process for informing its parent about potential collateral demands in its business, nor any protocols for assuring that FP could raise funds to meet such contingent liabilities
4. AIG lacked a central risk management office that would monitor exposures to comparable risks in different parts of the firm. Such an office would have spotted and prevented the securities lending business from taking on risks which FP had just decided to cease underwriting.
5. AIG parent had set no guidelines for capital commitments and stop losses at FP – guidelines which might have prevented FP from growing its derivative exposures to the levels now responsible for massive collateral calls.
6. AIG FP had no guidelines for reserving capital in anticipation of losses on its derivative positions, losses which can easily result from being forced to sell securities at inopportune times to meet collateral calls.

Before concluding that on the merits AIG possessed a material weakness, Ryan weighed his list of concerns against the fact that most of the issues concerned AAA rated securities. Given the high apparent quality of these instruments, highly developed risk management processes may not have seemed necessary. Cassano was probably right that these securities would recover in the long run. AIG's own high credit rating may also have implied that liquidity backup plans were not a high priority.

Then there was the question of what constituted a "material" weakness? Would better controls have altered AIG's risks and protected its stock price? If shareholders had known more about AIG's internal processes earlier, would they have priced the stock differently? Ryan felt the answers to questions such as these touched on what would have been material.

Ryan did feel that he needed to consider AIG's delicate financial condition. AIG was being squeezed severely by its counterparties. This was happening at the same time that bank lending was in sharp decline and capital markets were freezing up. Insurance regulations raised strong barriers to AIG transferring capital internally. Increasingly the firm was dependent upon short term borrowing to meet the next collateral call. Would publicly forcing a "material weakness" admission simply reinforce these adverse conditions? Would it confirm counterparties in their belief that only cash collateral could assure them AIG would perform on its CDS contracts? Would it convince lenders that AIG didn't know the extent of its troubles and thus had no handle on its financing needs? Attachment 3 provides a summary of AIG's financial condition as of December 31, 2007.

Inaction on PW's part also had its risks. Ryan remembered the firm's being sued over AIG's 2005 accounting scandal. AIG's stock was now being battered. Eventually shareholders would go looking for a deep pocket to blame. Unless PW performed its audit role in impeccable fashion, it would rank high on their target list. Once another AIG "accounting scandal" hit the headlines, there was no telling where matters might go. Subsequent political pressures could even push the PCAOB into disciplinary action.

Ryan began to consider whether PW had any options. One possibility would be to lead the Board Audit Committee into instituting major controls revisions within FP in particular and AIG in general. These would include, at a minimum, new FP management, reconstituting a central risk management function, providing new information systems, and redesigning the information channels between FP and senior management. Loss reserves and liquidity backstop measures would also need attention. Ryan also began to consider how broad or narrow to make any "material weakness" finding. If such an announcement was made, should it come only after AIG had lined up additional financing?

Lastly, Ryan looked around at the conduct of the other big accounting firms. So far, none had made any "material weakness" findings at any big financial firm – this despite such revelations as Citibank's stashing billions of subprime securities in off balance sheet SIVs, only to take them back because of detailed triggers embedded in the SIV's commercial paper. KPMG had said nothing at all about Citi's controls, but continued to issue clean certifications. How different was that from AIG's discovery of its "collateral triggers?" Did PW want to be the first public accounting firm to force a "material weakness" finding, and then watch its client implode?

Ryan decided to sleep on his decision. He put his control concerns list in a desk drawer and headed out the door, wondering if sleep would be possible with so many questions to ponder.

# SOX and Auditor Independence

By Mike Morley, CPA, author of "*Sarbanes-Oxley Simplified*"

The *Sarbanes Oxley Act of 2002* addresses the issue of the independence of auditors. The lack of objectivity was a major contributing factor to the events that led to Enron's collapse and the enactment of the *Sarbanes Oxley Act of 2002*. Before Enron, investors counted on auditors to protect their interests by setting off the alarm if something was not quite right. Unfortunately, auditors stood to make large sums of money if they did not ring the bell to alert investors. Enron (and many other companies since then), its auditors, and to some extent its executives, analysts, and investment bankers, got away with it only because they participated in a conspiracy of silence that sacrificed objectivity for money, and careers for short-term gain.

The *Act* designates some specific services as being outside the permissible scope of the practice of auditors. Registered public accounting firms that provide audit services cannot, at the same time, provide non-audit services such as bookkeeping, financial information systems design and implementation, appraisal or valuation services, fairness opinions, actuarial services, internal audit outsourcing services, management and human resources functions, broker or investment banking services, legal services, and expert services unrelated to the audit.

In addition, the public company's audit committee must pre-approve other non-audit services not on this list, such as tax services. However, the pre-approval requirement is not needed for non-audit services which are not more than 5% of the total amount of annual revenues paid by the client to its auditor if they are promptly brought to the attention of the audit committee, are approved prior to the completion of the audit, and are disclosed to investors.

SOX further stipulates that a registered public accounting firm is not permitted to provide audit services to a public company if the audit lead, or the audit partner responsible for reviewing the audit, has performed audit services for that public company in each of the 5 previous fiscal years. This rotation is intended to reduce the risk of personal relationships interfering with the auditor's independence and objectivity.

The registered public accounting firm that performs an audit is required to tell the audit committee all critical accounting policies and practices to be used, all alternative treatments of financial information within generally accepted accounting principles that have been discussed with management officials and the consequences of using them, what treatment the firm recommends, and all important written communications between the firm and management of the issuer (such as any management letter or schedule of unadjusted differences).

The *Act* does not permit a public accounting firm to perform any audit service for a public company if the firm employed any of the company's key executives within a year prior to the start of the audit.

With its far-reaching enforcement powers, the Securities and Exchange Commission (SEC) monitors and regulates the accounting profession. As well as setting standards for auditing and accounting practices, the SEC can start legal, administrative, or disciplinary action against any registered public accounting firm or individual auditor at any time. Penalties can range from censure to disbarment, and include fines of up to \$1 million, and prison terms of up to 20 years.

In a continuing effort to restore the trustworthiness it enjoyed prior to the Enron debacle, the accounting profession has instituted an educational requirement that includes mandatory Ethics training, stricter peer reviews, and stiff penalties. However, it is still up to every individual to strive to choose principles and career over short-term material gain.

**Summary: AIG's Financial Results 2000-2003**

<b>AIG Inc. (NYSE:AIG) 2000-2003 Financials</b>				
<i>In Millions of the trading currency, except per share</i>	<b>Currency:</b>			
	<b>Order:</b>			
<b>Key Financials<sup>1</sup></b>				
<b>For the Fiscal Period Ending</b>	<b>12 months Dec-31-2003</b>	<b>12 months Dec-31-2002</b>	<b>12 months Dec-31-2001</b>	<b>12 months Dec-31-2000</b>
<b>Currency</b>	<b>USD</b>	<b>USD</b>	<b>USD</b>	<b>USD</b>
<b>Total Revenue</b>	\$81,302.00	\$67,482.00	\$61,766.00	\$56,338.00
<b>Total Liabilities</b>	\$606,901.00	\$499,973.00	\$438,709.00	\$265,611.00
<b>Net Income</b>	\$9,274.00	\$5,519.00	\$5,363.00	\$6,639.00
<b>Diluted EPS Excl. Extra Items<sup>3</sup></b>	\$3.53	\$2.10	\$2.02	\$2.52
<b>Total Assets</b>	\$678,346.00	\$561,229.00	\$493,061.00	\$426,671.00
<b>Long Term Debt</b>	\$71,340.00	\$49,416.00	\$46,395.00	\$38,069.00
<b>Total Equity</b>	\$71,253.00	\$59,103.00	\$52,150.00	\$47,439.00
<b>Stock Price</b>	\$66.28	\$57.85	\$79.40	\$98.56

Summary: AIG's Financial Results 2007

<b>AIG Inc. (NYSE:AIG) Financials- Key Stats</b>	
<i>In Millions of the trading currency, except per share items.</i>	<b>Currency:</b>
	<b>Order:</b>
<b>Key Financials<sup>1</sup></b>	
<b>For the Fiscal Period Ending</b>	<b>12 months</b>
	<b>Dec-31-2007</b>
<b>Currency</b>	<b>USD</b>
<b>Total Revenue</b>	<b>\$110,064.00</b>
<b>Total Liabilities</b>	<b>\$952,560.00</b>
<b>Net Income</b>	<b>\$6,200.00</b>
<b>Diluted EPS Excl. Extra Items<sup>3</sup></b>	<b>\$2.39</b>
<b>Total Assets</b>	<b>\$1,048,361.00</b>
<b>Total Debt</b>	<b>\$162,935.00</b>
<b>Total Equity</b>	<b>\$95,801.00</b>
<b>Total Debt to Capital</b>	<b>62.97%</b>
<b>Stock Price</b>	<b>\$58.30</b>

## Author's Note

This is a dual case. On the one hand, it is about the adequacy of controls and disclosure at AIG. The case examines the causes and potential consequences of AIG management's stunning lack of understanding of its derivative risk exposures. Here again one can see the connection between weak controls and management blindness as to its true financial condition.

Yet, in a deeper sense, the case is also about PriceWaterhouseCoopers. More specifically, it is about the auditor/client relationship post-SOX. Sarbanes Oxley was supposed to enable CPAs to stand up to their clients when there were important, if inconvenient, disclosures to be made. It also sought to promote greater focus on good controls. Here we get to examine how this revamped relationship is working out. PWC must make a very tough call on AIG.

Students of this case should stand in Tim Ryan's shoes. Ultimately it will be his decision whether to force AIG to admit publicly to a material controls weakness. Ryan must consider this matter on the merits, and in the full light of PWC's legal responsibilities to investors. He also knows that his client is wounded, and that a material weakness admission will render it even more vulnerable. Should AIG survive, they may later fire PWC for having taken a hard line. On the other hand, PWC has already been sued for missing an earlier AIG accounting scandal. PWC is likely to pay out tens of millions of dollars to settle that suit. Thus, the case involves a familiar, if more intense, set of auditor issues. Audit and business concerns pull in different directions. What takes precedence? Once that's decided, how best does one manage the remaining business, client and legal complications?

This case draws heavily on **All the Devils are Here**'s account of the AIG's entry into credit default swap writing and Hank Greenberg's management of the company. Mclean and Nocera present a quite favorable portrait of Tim Ryan. Additional facts were provided by William D. Cohan's book on Goldman Sachs. Goldman stood on the other side of many AIG swaps, and was the leading aggressor in making collateral calls against the insurer. Important balance was provided by Francine McKenna, a former PWC auditor. Now the author of a blog, ***The Auditors***, she correctly pointed out PWC's failure to catch Greenberg's earlier accounting fraud, and its months of delay in confronting AIG senior management about the situation at AIG-FP. McKenna has documented that PWC knew of FP's exposures and Goldman's collateral calls during the summer of 2007. Yet, it only began to force the issue with management in November. What might more timely and assertive action by PWC avoided in the longer run?

For all its flaws, PWC and Tim Ryan were more proactive than any other auditor before and during the financial crisis. As students read the cases about Citigroup, they should also be wondering what KPMG was doing in its audits. The other Big 4 CPA firms fared no better. Whatever improvements SOX may have achieved in corporate reporting, the auditor/client relationship still seems an area in need of further reform.

## Notes

1. McLean, Bethany and Nocera, Joe, ***All the Devils are Here***; Portfolio/Penguin, New York, 2010, pg. 335
2. Ibid., pg. 336
3. Ibid., pg. 340
4. McKenna, Francine; <http://retheauditors.com/2011/06/08/two-wildly-different-stories-about-deloitte-or-are-they/>
5. McLean and Nocera, op. cit., pg. 53
6. Cohan, William D., ***Money and Power, How Goldman Sachs came to Rule the World***; Doubleday, New York, 2011, pg. 315
7. Ibid., pp. 326
8. McLean and Nocera, op. cit., pp. 55-58
9. Sorkin, Andrew Ross, ***Too Big to Fail***; Viking, New York, 2009, pg. 154
10. Ibid., pp. 155-156
11. McLean and Nocera, op. cit., pg.192
12. Sorkin, op. cit., pp. 154-155
13. McLean and Nocera, op. cit., pg.189
14. Ibid., pg.
15. Ibid., pg. 329
16. Ibid., pg. 195
17. Ibid., pp. 197-198
18. Ibid., pg. 198
19. Ibid., pg. 199
20. Ibid., pg. 199
21. McKenna; <http://retheauditors.com/2010/02/02/the-great-american-financial-sandwich-aig-pwc-and-goldman-sachs/>
22. McKenna; e-mail to author, 6-1-2012
23. McLean and Nocera, op. cit., pg.191
24. Ibid., pg. 201
25. Ibid., pp. 190-191
26. McKenna; conversations with author and references to AIG Board Audit Committee notes
27. McLean and Nocera, op. cit., pg.324
28. Ibid., pg. 325
29. Ibid., pg. 333
30. Ibid., pp. 330-331
31. Ibid., pg. 335
32. Sorkin, op. cit., pg. 160
33. McLean and Nocera, op. cit., pg.339
34. Ibid., pg. 328