

**“THE BEST OF NERA”
TUESDAY JULY 27, 2004**

THERESA GABALDON: Good afternoon. I'm Theresa Gabaldon, the Carville Dickinson Benson Research Professor of Law at The George Washington University Law School, and host today of an online program, “The Best of NERA”, presented by the Securities and Exchange Commission Historical Society. The Securities and Exchange Commission Historical Society is a non-profit organization, separate from and independent of the SEC. The Society preserves and shares the history and historic records of the SEC and of the securities industry through its virtual museum at www.sechistorical.org. Today's online program will be preserved in the museum, so you can listen to the discussion or read the transcript later. Today's online program offers top presentations by economists from NERA Economic Consulting from their recent 2004 Finance, Law and Economics Securities Litigation Seminar. Paul Hinton will discuss recent trends in shareholder litigation. Jeffrey Baliban and Dr. Elaine Buckberg will next discuss the use of financial statement information to analyze company risk, valuation, and solvency. We will conclude the program with a discussion with all the panelists on the issues raised. This chat is made possible through the support of NERA Economic Consulting. The remarks made today are solely those of the speakers, and are not representative of those at the Society. Our speakers cannot give investment or legal advice.

We'll begin by introducing Paul Hinton, a NERA Vice president and a graduate of Oxford University and the John F. Kennedy School of Government at Harvard University. He has managed and directed projects in the economics of anti-trust, product liability, and mass torts, regulation, securities and commercial litigation, intellectual property and transfer pricing. Paul, as you know, the latter half of the 1990's saw implementation of the Private Securities Litigation Reform Act, and the first years of the 21st century saw adoption of the Sarbanes-Oxley Act, both of which were intended to have an effect on securities class action litigation, perhaps in different ways. Just what is going on in securities litigation area in this post-PSLRA, post-Sarbanes-Oxley world?

PAUL HINTON: Well, thank you, Theresa. In the last few years, we have seen a number of corporate scandals that have hit the headlines and caught a lot of attention, and as you say, Sarbanes-Oxley was passed in reaction to some of those scandals. In July 2002, it was enacted, and indeed, the attention there was that the act will reduce fraud by improving governance and accountability, and improve financial disclosures. At the same time, recently we've seen some of the largest settlements in shareholder class actions, so this does raise the question, is there a trend here in shareholder litigation? Is there a rise? Is this something that's going to be sustained in the future, and is this due to the Sarbanes-Oxley Act?

Well, at NERA, we like to believe we have the answer to some of these questions. We derive our answers from an empirical analysis of a database of filings and settlements in shareholder litigation that we maintain throughout the year and we publish an annual study of the analysis we do with these data. I'm going to share some of those insights with you today. A rise in litigation could take one of two forms: an increase in filings or an increase in settlements. Let's think what we would expect to happen in this context. With the corporate scandals that we've seen, we might expect to see an increase in litigation, but Sarbanes-Oxley has obviously introduced some measures that, perhaps over the longer term, we'd expect to reduce litigation by improving disclosures and reducing fraud. However, there was one other element of the Sarbanes-Oxley Act which extended the statute of limitations on shareholder litigation, so perhaps over last two years, we'd expect to see an increase in filings.

Well, at first glance, filings appear to have declined in 2002. There was a big peak in 2001 filings, reaching a level of 503, and there's been a downward trend since then, but if you look more closely at what was going on in 2001, you'll discover that there were a large number of extraordinary cases involving IPO laddering and analyst cases. They actually represented

more than half of the cases that year – 308. So if you remove these extraordinary cases, which we don't believe are likely to be repeated in the future, you'll see a rather different picture. In fact, you would see that the 2000 level of filings was higher than in 2001.

One contributing factor in a number of shareholder litigation cases is financial restatements, and in fact, this slight increase in 2002 might be in part a result of a peak also in accounting restatements in the latter half of 2002. It appears that many companies may have been taking that opportunity in the wake of Sarbanes-Oxley to clean house, and having made a number of changes, made some financial restatements, and the level of financial restatements has since declined. So too has the level of filings, although they appear now to be really consistent with the longer-term trend of about 217 cases a year. In 2004, in the first five months, there were 100 filings, and that represents an annualized rate of about 240 cases, which is pretty close to the current trend.

So what does this mean? Well, for one thing, it means if you're a publicly traded company, you have about a 9% probability of facing a lawsuit over five years, which is quite a surprisingly, shockingly high number, perhaps. That's about just less than 2% a year. If litigation is really the mechanism through which Sarbanes-Oxley is being enforced, you'll see that these provisions are really imposing quite a high burden on corporate America. Having looked at the effect on filings, let's look at the issue of settlement values. We might expect to see a decline in settlement values for the same reason – over time if corporate fraud misconduct is diminished. Well, immediately following enactment, we saw, as I mentioned earlier, some very large settlements - Lucent Technologies was \$517 million, and Daimler-Chrysler and Oxford Health Plans were each \$300 million. These were extraordinary headline cases in the top six case settlements of all time, but they're not actually indicative of a continuing problem, but rather the resolution of a preceding one. They were all filed prior to Sarbanes-Oxley, so we can't really conclude that those had anything to do with the act.

Settlements actually peaked in 2001 and have since returned to really a trend level, and so if you look before and after Sarbanes-Oxley, the average settlement overall is about the same at about \$15 million. Now of course, large cases tend to distort the picture and there's indeed a great variation within that average \$15 million amongst a few very large cases, of which in 2003 there were six that were larger than \$100 million, but they're also, the vast majority, two-thirds, less than \$10 million in size. So you can capture that distribution by looking at the medians, which are less affected by the larger settlements. If you do that, you see that there's even more continuity over time than you would observe by just looking at the averages, although once again, the median peaked in 2002 at \$6 million, and has now returned to its prior level of about \$5 million.

So, it appears that the long-term trend in settlement values is pretty stable, but there is a trend here in the payout ratio, which has been declining almost continuously since 1996. The payout ratio is the relationship between the amount of the settlement and the amount of investor losses, investor losses measuring the amount that the investor would have made compared with an investment in the S&P 500. This payout ratio has reached an all-time low, close to 2%, and if this trend continues, average settlements would decline unless there is an offsetting increase in the size of cases.

You won't be surprised to hear from an economist that means and medians don't tell the whole story. You've got to look at a more complex mix of factors that are underlying settlements going on, and what we do with the data that we assemble is to analyze the different factors that affect settlements, so that we can get a deeper look at what's really going on. We find that settlements involving accounting restatements and regulatory investigations and other corporate malfeasance actually tend to be higher. This tells us that if the Sarbanes-Oxley Act is effective over the long-term at reducing some of these problems, then we would expect to see settlements go down, even if filing rates remain unchanged. NERA statistical analysis of settlements actually is able to explain 60% of the variation in settlement values by looking at the

individual characteristics of cases. Our model is actually able to explain to a large extent, the peak in settlements that occurred in 2002. It turns out that these weren't really more egregious cases that happened to be being filed or settled during this time, but they were just larger cases, and the size of cases is a very major driver in the size of settlements, perhaps not surprisingly. Since then, the size of cases has declined, and that's been one of the major factors that led to a reversion in level of settlements. Investor losses as a measure of the size of cases, as I said, is probably the most important factor in driving settlements, but there are a lot of other factors, too, that are important. If there is an accounting co-defendant in your case, you expect settlements to be 71% higher. Bankruptcy of a defendant actually reduces the expected settlement value by about a third. Other factors that affect settlements include the size of the defendant and whether or not other securities are named in the complaint.

NERA uses this model of settlements in shareholder litigation to advise clients on expected settlement values. Simple averages are not reliable predictors of individual case outcomes, but our predictions, which account for some of the case characteristics, have actually proved to be quite accurate. We also use this analysis to advise on reasonable directors' and officers' insurance limits. After this hiatus in 2002, litigation seems to have really settled back down to the trend level, so apparently, not much has changed. Actually, there are a few new trends in settlements, and one of the interesting features of settlements that has occurred since Sarbanes-Oxley has been the eight or so settlements that have included explicit provisions that went beyond Sarbanes-Oxley in modifying corporate governance in the defendant companies. Those provisions have included requirements for the rotation of audit firms, certain provisions for memberships of the board of directors, director compensation and duration of service. Another trend is that we've seen since 1997, an increase in derivative suits, which is an alternative means for shareholders to seek corporate governance control. These suits typically allege that directors and officers breached their fiduciary duty to the corporation. The rate level of these cases has actually increased about 50% since 1997. This greater activity should increase the deterrence effect of corporate governance abuses.

In conclusion, it may be that there's no immediate effect, or obvious effect at this time of Sarbanes-Oxley Act, but perhaps it's just a little bit too early to see that effect. If Sarbanes-Oxley is effective over time in reducing the levels of corporate misconduct, we would expect to see reductions in settlements; however, what we have seen in the short-run is lower investor losses and lower payout ratios leading to lower settlements, and certainly if these two trends continue in the future, settlements will continue to decline.

THERESA GABALDON: Thank you. That was very interesting. Our format today calls for me to turn to the other speakers, and then, at the conclusion of their presentations, we will reconvene for some discussion, and certainly there will be some very interesting things to talk about based on what you just told us.

We will now focus our attention on a discussion of financial statements. We have two speakers for this topic. Jeffrey Baliban, a NERA Vice president, is a graduate of the University of Texas, an economist and a certified public accountant. His projects include industry and economic analysis and modeling, investigative accounting and auditing, financial statement analysis and business valuation. Dr. Elaine Buckberg, also a NERA Vice president, received a PhD in economics from MIT. At NERA, she provides litigation support related to securities and finance, as well as advisory consulting on risk management, international macroeconomics, and regulatory issues. Jeffrey, I know from a peek at some of your notes, that there is a good deal more to company valuation than just looking at the bottom line. Can you enlighten us?

JEFFREY L. BALIBAN: Sure. Thank you, Theresa. Paul had mentioned the issue of restatements, and hinted at the big bath phenomenon and the issue also of riskiness in the financial statements, becomes important in securities matters where a complaint will indicate words to the affect, but for the materially false, misleading financial statements, and then you can fill in the blank – the bonds wouldn't have been sold, the investment would not have been

made, or some other action would or would not have occurred. These issues often revolve around whether risk was appropriately disclosed in the financial statements.

So what I'm discussing today is assessing financial condition and anticipating financial distress. Now, we're all familiar with typical financial statements – the balance sheet, the income statement, the statements of cash flow and stockholders' equity. The balance sheet reflects a company's financial position, that is, its economic resources and claims against them, in accordance with generally accepted accounting principals, or what we call GAAP. An income statement and the statement of cash flow reflect the results of operations for the period under consideration. In other words, they summarize the flow of transactions that explain how the beginning balance sheet balances become the ending balance sheet balances. But what do they indicate about the value of an investment in that company, or the inherent riskiness of an investment in that company?

Different investors and stakeholders have different information needs. Equity holders are typically interested in a company's ability to grow shareholder value, bondholders, the ability to service debt. As a user of financial statements, it's important to be able to extract useful information with regard to financial condition and expectations from GAAP presentations.

In assessing the value of a business, focus needs to be on expected future returns. In an efficient market, the value of a company today is the present value of its expected future returns. That present value essentially embodies two concepts – a forecast of expected future returns, and a discount rate designed to adjust not only for time, but also for risk; that is, the probability that the forecast may not come about. A company's historic track record may be useful in gauging expectations, but we know financial results are typically correlated to many economic factors present at the time the transactions occur. The discount rate does more than just account for the time value of money. It considers risk, and so can be viewed as an investor's required rate of return, or the return that's sufficient to coax the investor to put money into this particular investment as opposed to, say, a fully diversified portfolio often viewed as an appropriate investment alternative. Obviously if I, as an investor, am considering a stock investment, I realize a greater level of risk in that investment since I'm not availing myself of the opportunity to hedge through diversification. As such, I'll require a greater level of return as an incentive. The greater the risk I perceive, the greater the return I'm going to require.

Now, we talked about the value of a company today being the present value of the expected future returns. The present value formula is nothing more than a simple fraction where the future returns are the numerator, and the denominator includes a discount rate. So we know that the greater the risk, the larger the discount rate, the larger the discount rate, the larger that fraction's denominator. The larger the denominator, the smaller the fraction, and so the greater the risk, the lower the present value.

Now what factors go into building this discount rate and assessing this risk? Capital market theory separates risk basically into two categories – systematic and unsystematic. The systematic risk of a security is that part of the total risk that's associated with movements in the underlying market as a whole. It's often measured by what analysts refer to as beta. The beta tells us the proportionate shift in our subject stock's return for every one-point shift in the market's return.

Unsystematic risk refers to the company's specific risk, that is, the risk of a price change due to the unique circumstances of a specific security, as opposed to the overall market. It's the riskiness of a company's returns due to its own business model, its own access to capital, materials, markets, depth of its management, internal and external factors affecting the success or failure. The market provides information on systematic risk, so where do we get information on a company's specific risk issues? Most of that will be gleaned from the foremost communication method that companies have with their shareholders, and that is the financial statements that they publish on a regular basis. Understanding these statements, that is, having the ability to extract useful information, is quite important. It's necessary to know, then, not only

what the balance sheet says about a company's financial position, but also what it's telling you about a company's financial condition.

Analysts typically assess financial condition in light of four generalities – liquidity; solvency, sometimes called leverage; efficiency and profitability. So let's define these concepts and discuss how we can extract salient information from financial statement presentations. Liquidity typically refers to the sufficiency of funds available to the company to meet its debts as they come due. Good companies manufacture products or provide services, bill for those products or services, and collect revenue quickly and efficiently. A breakdown in the process leads to increased financing costs, inefficient operations, and difficulty with creditors, even the danger of involuntary bankruptcy. Liquid assets are typically cash or those assets destined to be quickly turned into cash, like accounts receivable and inventory for sale. What level of liquid assets is sufficient? Well, that's entirely dependent, in my view, on how much trade accounts payable do you owe, what other short term debt is currently owed. In other words, if someone asked me, as I've been asked before, is \$5 billion in current liquid assets enough? And my answer is, if you owe \$6 billion in current debt, it's simply not enough. The current ratio, that is, the current assets divided by current debt, is therefore one of the first relationships that most accountants and analysts eyeball when looking at a financial statement. This simple ratio can identify much about management's ability to efficiently maintain operations, deal with sudden demands for cash, continued demand for the company's products and its ability to read business trends. Old rules of thumb put a healthy current ratio of 2 to 1, although a lower rate doesn't necessarily mean that there is weakness. The amount by which liquid current assets should exceed current debt is really industry-specific.

Solvency relates to the method of asset financing. All of a company's assets are financed either through equity infusions or the incurrence of debt. Solvency ratios typically indicate the proportionality of that asset ownership. The most familiar solvency ratio is debt to equity. It indicates the extent to which a company is leveraged in its asset acquisitions. Here again, it's not necessarily the specific value of the debt to equity ratio that's important, but how it compares to its competitors, and how it's changed, or moved, in the recent past. A high debt to equity ratio is not necessarily bad, but it does indicate an increased level of risk, should there be a sudden demand for cash, or should liquidity ratios be deteriorating. Banks often require a sufficient level of equity financing before considering debt infusions, or further debt. Therefore, solvency ratios are typically key financial indicators to long-term creditors, and are frequently an important part of debt covenants. Solvency ratios don't only indicate the proportion of debt versus equity, but they can also be reflective of the type of debt, for instance, the ratio of short to long-term debt. Excess long-term debt can tie up money, a company's finances, and reduce its ability to invest in research and development. It can sap its ability to take advantage of favorable investment opportunities. So solvency, or more specifically, insolvency actually will be discussed in more detail by Elaine in her discussion on fraudulent conveyance.

Efficiency, how can we measure the efficiency of how a business is run? It can be measured by various balance sheet and income statement ratios, usually indicating activity or turnover. An example is inventory turnover. If a company's annual cost of sales is, say, a million dollars, and its average inventory balance carried is, say, a hundred thousand dollars, it can be said that it turns its inventory over ten times a year. Now while there's nothing magic about the number ten, it's true that a higher rate of inventory turnover indicates a more efficient operation, reduced carrying costs, quicker manufacturing, a more efficient conversion process of production into cash. Charting changes in the inventory turnover over time could indicate demand issues, maintenance of quality and production, and the probability of liquidity issues. Another often cited efficiency ratio is accounts receivable turnover. This indicates how quickly bills are being collected and how quickly credit sales are being turned into cash. The sufficiency of the rate will be indicated by the presence or absence of liquidity problems, bad debt reserve

sufficiency, and rate changes over time. There are many other similarly fashioned efficiency ratios.

Profitability, the fourth financial condition generality, is exactly what people think it is, the extent to which there is residual revenue once all costs and expenses are met. It's often expressed as return: return on investment, return on assets, return on equity. Again, and this is important with respect to all the ratios we've discussed, the individual ratio calculated may be in and of itself, meaningless, that is, the value of it. However, ratios can provide quite powerful insight when compared to those company's peers and/or to their own historic values, that is the changes in those ratios over time. Ratios can be broad and general, dealing with whole groups of accounts. They can also focus in on specific values. For instance, there's a "times interest earned" ratio, which compares earnings before interest and taxes to interest expense, and indicates how well a company's earnings can meet its debt service requirements. Bondholders review changes in this ratio regularly. Other ratios can offer insight on several financial condition aspects. For instance, earnings before interest and taxes, sometimes called EBIT, can be compared to total assets. It will indicate the return on asset investments. Comparing that return rate to interest rates on outstanding debt can indicate whether the assets are generating a return greater than or less than the debt incurred to acquire them.

There are many other interesting and insightful combinations of financial statement factors relied on regularly by creditors and analysts. These ratios have been shown empirically to be meaningful in models designed to indicate probabilities of financial distress or failure. There are a variety of models that have been developed over the years, many of which have been used by, or developed by, discriminate, interpretive analysis to show a company's probability of going into bankruptcy, probability of financial distress, and a variety of other odds of financial insolvency. So in summary, financial statements contain a wealth of data that analysts and creditors use to extract useful information on financial condition and the probabilities of financial distress. By combining various reported items into meaningful comparisons and ratios, a wealth of information and insight can emerge.

THERESA GABALDON: Thank you. Elaine, I understand you are going to address the relationship between valuation and the scary sounding topic of fraudulent conveyance.

DR. ELAINE BUCKBERG: That's right. I'm going to build a little on Jeff's discussion of valuation of financial risk and put that knowledge to work talking about fraudulent conveyance. Now fraudulent conveyance is a type of bankruptcy law dating back to the Elizabethan era. In the next few minutes, I'll explain what fraudulent conveyance cases involve, and how we can determine whether fraudulent conveyance has occurred using financial data and valuation analysis. In the current era, fraudulent conveyance cases typically arise when a company makes a financial transfer, and the company ends up in bankruptcy not long after. Unsecured creditors sue, alleging that the transfer improperly shifted assets out of their reach by giving them away, or selling them too cheaply. The transfer may be improper if the company is in the zone of insolvency at the time of the transfer. Under normal conditions, management's duty is fairly straightforward – it's to maximize the interests of shareholders. But in the zone of insolvency, management's duty needs to shift. It has to consider the rights of creditors as well as the interest of shareholders.

I'm going to give you a two-minute review of the Elizabethan era problems that led to the fraudulent conveyance laws to help illustrate their logic. Consider a 16th century Yorkshire sheep farmer. He's deeply in debt, and he spots the sheriff coming over the hill to seize his flock. Before that can happen, our cunning shepherd gives the sheep to his own brother. This is a classic fraudulent conveyance. The farmer is either insolvent, or made insolvent by the transfer. Because the sheep were an outright gift to his brother, he didn't receive consideration for them equal to their value; in fact, he got nothing. The assets that would have been available to the farmer's creditors, the sheep, have been stripped away without anything of similar value

in replacement. Without fraudulent conveyance laws, the creditors would not have recourse to the sheep, now owned by the brother.

Now, let's consider a different situation that could occur in late 17th century London. The prosperous captain of an ocean-going vessel has received backing in the form of notes for a sailing venture to the Spice Islands. A successful voyage means he'll return with a cargo expected to be worth at least 20 times the investment, but here's the catch. The voyage will be extremely risky, due to pirates, storms, bad maps, and so on. Historically, only one in five such ventures has succeeded. According to the notes, the backers have recourse to the captain's assets if he defaults, in other words, if he returns with nothing. But prior to the voyage, our cunning captain transfers his wealth to his in-laws. Under a simplistic reading of fraudulent conveyance law, this isn't a fraudulent transfer because the captain is solvent at the time of the transfer, and viewed in terms of expected value, his voyage has a one in five chance of grossing him 20 times its cost, so he's solvent in expected value. But for the backers, as a result of this transfer, what had been notes with at least some security because of the perceived wealth of the captain, have now been converted into notes with a 20 percent chance of being valuable and an 80 percent chance of becoming worthless. To plug this gap in the fraudulent conveyance laws, there developed the notion of a transfer leaving the enterprise with inadequate capital. The transfer can be deemed fraudulent if it leaves the individual or the company making the transfer inadequately capitalized to repay debts in the event of likely and foreseeable adverse fortuity.

Let's talk about the modern legal standard. The legal test for fraudulent conveyance is the same whether you're in federal or state court. Plaintiffs need to demonstrate that two tests are met in order to prove a fraudulent conveyance. There's one mandatory test that they must demonstrate and one of three alternative tests. The mandatory test states that the company received less than "reasonably equivalent value" for the transfer. This is our sheep farmer giving his sheep to the brother and getting nothing in return. As I said, there are three alternative tests. Number one says that the company or the individual was insolvent at the time of the transfer, or became insolvent as the result of the transfer. Our sheep farmer may have been insolvent before the transfer; he's certainly insolvent after. Number two says the company or individual was left with unreasonably small capital. This is our ship's captain giving his assets to his in-laws. And number three, that the company or individual intended to incur debts that would be beyond the debtor's ability to pay. Now I said legally we've got one mandatory and three alternative tests, but from an economic perspective, there's really only two alternative tests because the debt criterion is not meaningful. Any firm that's solvent can pay its debts. If it's long-term solvent, it can have losses in one period and borrow or consume working capital to get through that period. So the law can be reduced to three economic tests – reasonably equivalent value, our mandatory criterion; solvency, and capital adequacy. If a transaction fails reasonably equivalent value and either solvency or capital adequacy, it's a fraudulent conveyance.

The 21st century transfer involved in fraudulent conveyance are a little different than sheep and ship's captains. A typical case could involve dividend payments, leveraged buyouts, corporate or financial restructuring, or merger and acquisitions. Let's think about a dividend payment. In this case, a company gives money to shareholders, and it gets nothing in return. This would meet our mandatory criterion. A leveraged buyout is even worse from the perspective of the unsecured creditors. A company gives money to shareholders and it takes on more debt. And in an M&A transaction, if plaintiffs can find that either the price in a cash merger or if we're talking about a stock-for-stock merger, the exchange ratio is either too high or too low, the mandatory criterion is met. In other words, unless we have the Goldilocks merger where the price is just right, we meet the mandatory criterion. If you consider that most mergers involve the payment of a premium by one company acquiring the other, most mergers would meet this criterion. So then we have to worry about solvency and capital adequacy.

Let's take a minute and talk about who is liable. In a fraudulent case, virtually every party to the transaction may be named as a defendant. We're talking about directors and officers of the company, as well as advisors, which have included accounting firms, investment banks involved with the transaction, even law firms. And it's worth noting that intent to defraud does not need to be shown. For managers of companies, corporate executives, the question here is how do I avoid a fraudulent conveyance claim. I'm making transactions. I'm making transfers. Well, when a transfer is made, if the firm is near the zone of insolvency, the company needs to give some thought to the rights of creditors in addition to the rights of shareholders. This often requires a shift in perspective that can be quite foreign to management, to directors, and to the firm's advisors.

The standard the Board can use is as follows. If the transfer can be paid out of existing surplus and there will be enough post-transfer surplus left in the firm to keep it solvent, then this transfer should not pose risk of a fraudulent conveyance claim. Now that probably sounded really clear and easy, but unfortunately it's really not a bright line test. There's some difficult questions to be answered at the time of the transaction. What is meant by insolvency? How does the company value assets and liabilities so as to determine whether there will be a surplus? And if there is a surplus, is it large enough to satisfy the capital adequacy requirement? Although, often the objectives of courts and businessmen differ, there should be enough clarity in the decisions coming from the courts that decide fraudulent conveyance cases to provide guidance to business. But unfortunately, court decisions in this area have been like chutes and ladders. Sensible decisions have been followed by others that are well-meaning, but open up management and advisors to arbitrary claims of liability.

One problem that's created for management by the courts is the use of differing standards to determine solvency, and these differing approaches, some of which Jeff spoke to, can give contradictory answers. In these cases, the most common approaches have been assessment of balance sheets and discounted cash flow. Some courts have also considered GAAP income statement evidence of solvency, and financial ratios. From an economic perspective, the preferred approach is clear; it's discounted cash flow. From an economic perspective, a company undertook a transaction that damaged pre-existing creditors. This is all evidenced by discounted cash flow, and in evaluating the risks of a transaction, the economic standard should be whether the company passed that critical point at which management's fiduciary duty needs to shift from maximizing the interests of shareholders to being obligated to make decisions that consider both the interests of creditors and shareholders. This occurs when the capacity to service the firm's debts become questionable. Either the discounted cash flow of the firm is projected to be negative, or there is a significant risk that it could be negative.

Let me explain the merits of discounted cash flow in fraudulent conveyance cases. In terms of fraudulent conveyance cases involving the sale of a company or business unit, all three fraudulent conveyance tests effectively call for valuation analysis: reasonably equivalent value, the solvency test, and the capital adequacy test. The courts have ruled that if a company was operating at the time of the transfer, it should be valued as a going concern. In other words, the valuation should be forward looking. From an economic perspective, the value of an operating company is equal to its discounted cash flow. This is the value today of its future profit stream, and discounted cash flow is truly the fundamental concept of valuation in finance, whether you're talking about a company, a share of stock, or a bond. The question, is what's the value today of the stream of future payments? If you're holding a corporate bond, a treasury bond, what's the value today of the coupon payments you'll receive and the principal you'll receive back?

Now bear in mind, and I alluded to this before, you can have a company that will have a period of negative cash flows and it's still solvent. It's still able to pay its debts as they come due because a solvent company will be able to get through this period of negative cash flows. It can either consume working capital and replenish it later when its profits are again positive, or if it's

clearly solvent, it will be able to succeed in borrowing and obtaining additional short-term financing.

The discounted cash flow approach lends itself to all three fraudulent conveyance tests. Reasonably equivalent capital – this test calls for the valuation of the assets sold and comparison of that valuation with the price received or the consideration received by the company, and the valuation of the assets sold is its discounted cash flow. It's worth noting that there may be a lot of assets where you observe price, even that price is based on discounted cash flow. Again, look at a share of stock or the market capitalization of a company based on its stock price. That's a discounted cash flow. Solvency – this test calls for valuation of the company or unit. And last, the capital adequacy test calls for some way of assessing whether the transfer has marginalized the company's solvency. That is, will the company be solvent even in reasonable adverse scenarios, or could some likely adverse fortuity push it over the edge? This requires consideration not only of the expected cash flows of the company, but also their variability. One approach to this is to sensitivity test or stress test the company's valuation. Let's value it and then let's tweak that based on reasonable adverse scenarios, which have usually been interpreted by the courts as scenarios that have been observed by the company or the industry. The courts have made it pretty clear that the capital adequacy test doesn't mean that the company has to be able to withstand every imaginable scenario, just ones that would reasonably occur in the course of business.

You may recall that I mentioned court decisions looking like chutes and ladders, and now that I've brought you from the Elizabeth era into the modern day, I'm going to briefly close by mentioning one of the current legal frontiers in fraudulent conveyance laws, and this relates to contingent liabilities. We now have opposing decisions. The Second Circuit has said that contingent liability should not be considered. It used the word absurd to describe the idea put forth by plaintiffs in one case that every entity that had contingent liabilities in excess of its net assets would be considered insolvent. This would affect many companies. But more recently, Judge Wolin in District Court in New Jersey has ruled that unknown contingent claims should count, and this was a case involving W.R. Grace, which was known to have liabilities for asbestos, and actually went out and obtained independent assessments of those asbestos liabilities, and provisioned for the estimated claims based on the estimate. The actual claims came in higher than the estimates. Wolin ruled that the unanticipated claims, the claims that were observed with 20/20 hindsight, made Grace insolvent at the time of the transfer, even though this information was not black and white available at the time. So now that I've give you a six-century tour in twelve minutes or so, I want to turn you back to Theresa.

THERESA GABALDON: Thank you all. Your topics each raised some fascinating questions, although we'll have time to cover just a few of them. What I'd like to do now is to throw out some questions. I may attach a name to each of them, but that shouldn't preclude the other two of you from chipping in because I'm sure that your joint expertise will all have something to say about these matters.

Paul, since your presentation was first, I'll go ahead and start with you. You did mention that among the discernible trends was a decline in payout. Why do you think that's the case? Why has that happened?

PAUL HINTON: Well, that's an interesting question. It's not something that I've really formed an opinion about, but it is a trend that we've observed since 1997 with a slight, a few wrinkles along the way, but it may be that some of the effects of PLSRA, perhaps of tightening pleading requirements have actually bound over time, for example. So maybe in terms of discipline required in proving damages, that has become harder over time. The settlement amounts that are being realized can be looked at as your expectation of success at trial, and perhaps, if it's getting harder to succeed at trial in these types of cases because the pleading requirements are more stringent, then you might expect the payout ratios to decline.

DR. ELAINE BUCKBERG: Can I add something to that? We've also seen, I mean especially in 1992 and 1993, we had some cases with extremely large investor losses, and in those case where you're talking about billions of dollars in investor losses, the assets may simply not be there. So it's a question of in these enormous cases, it inherently drags down that ratio of settlement to investor losses because the funds simply aren't there to pay 7 percent.

JEFFREY L. BALIBAN: There might be one other wrinkle that I would add to that, and that is the directors and officers' insurance coverage issue. Directors and officers can have insurance coverage, D&O liability coverage for these types of issues. However, typical D&O policies do not pay where it's shown that directors and officers had been fraudulent or had committed a crime in the issue. And so once an investigation takes the direction of proving criminal action or fraud, that dries up a whole pool of money and a whole pool of funding that otherwise would have been in existence. So it could be that insurance companies who are very good at analyzing the finance of an issue, should we fight the legal battle on fraud with the potential of having to pay a lower amount or nothing at all, or should we settle for a lower amount today and make the issue go away, they'll often make the second choice, and so that may be a smaller payout.

DR. ELAINE BUCKBERG: It's even more powerful than in terms of settlements because 99 percent of these cases settle, and part of the reason why is these fraud exclusion clauses, meaning that if plaintiffs go to trial and they manage to demonstrate fraud, that means that the insurance will immediately be negated. So they've demonstrated fraud, but they've just lost the primary assets that would be used to compensate them, so it's a big reason driving why even plaintiffs want to settle before trial.

THERESA GABALDON: That makes a lot of sense. I was wondering, too, Paul, you mentioned what I would call governance settlements, that is, one aspect of the settlement is that the company agrees to reform itself in some way. Do you see any sort of trade-off there between cold, hard cash and willingness to play nicely in the future?

PAUL HINTON: Well, I think all of those provisions in the settlement are going to be subject to a negotiation with the counterpart, and so it's hard to believe there wouldn't be some sort of trade-off in terms of the cash portion of the settlement that was involved in adding those provisions. But it may be an area where clearly, in some of these settlements, a common ground has been found, and that the company's probably found itself not too burdensome to make those additional changes voluntarily as part of the settlement. Perhaps they were intending to do that anyway.

DR. ELAINE BUCKBERG: And it's nice PR for the company – we settled, and look how well governed we're going to be going forward.

THERESA GABALDON: That makes a lot of sense. Jeff, I was looking for a connection in one respect between your topic and Paul's, and that had to do with restatement and valuation. Could you address whether there is a relationship between the restatements that we've seen that have led to the litigation and then to the settlements, and what someone attempting to value a company should be thinking about in light of the fact that, oh, there might be restatement coming down the pike.

JEFFREY L. BALIBAN: Well, one of the interesting connections between some of the securities litigation that we've seen and the restatement issues and these financial condition analyses is doing an analysis to see whether or not a restatement actually impacts value long-term. Now typically when a restatement is announced, a company will say that we found some fraud, an earnings management issue, or something like that, smoothing whatever, and we've identified it and don't rely on our previously issued financial statements and we will be restating these things. And they set about the work of doing the investigation to determine how much. Ultimately, you find some amount that is restated due to the earnings management, but often you find a lot more in the restatement that's sort of this big bath that I think Paul had mentioned. So you might have a \$20 million financial fraud issue, but a \$300 million restatement and its

asset impairment issues, good will write-offs, and a whole variety of issues that are thrown in. And from the plaintiff's case, that makes sense. I mean it's much more compelling to say there was fraud, they restated for \$300 million, as opposed to, say, \$20 million or a smaller number. But to what extent do all those changes and restatements affect the future value of the company? Again, as Elaine had pointed out in looking at solvency and looking at value, what you're looking at is the present value of expected returns. So if you've corrected some mistakes in the past, does that necessarily mean that your future earnings capacity is going to be impacted, and by looking at some of the ratios that I discussed, and some other ratios that I haven't, obviously I haven't gone through all of them, there are hundreds, maybe thousands of them, but in analyzing the financial statements and the impact of the restatements, looking at ratios before and ratios after, if you can show that even as a result of the restatement that liquidity should be fine. They're no less solvent. They may even be more efficient. Return on assets may be better once you've impaired assets and reduced the denominator of that fraction. You may be able to show that a portion of the restatement may be due to other issues, other items or other timing issues, and so when a damages amount is levied, something that is determined by, say an event study, that says here's the value of the stock, then there's an announcement of a \$300 million restatement, the stock plummeted and then it came back and so, through our event study methodology, we've come up with a difference. How much of that difference is due to the fraud issue versus how much may be due to other issues that are unrelated.

THERESA GABALDON: Elaine, in your presentation, you emphasized the legal test for fraudulent conveyance, and you indicated that from an economic perspective really the discounted cash flow method made by far the most sense, and nowhere in that discussion was any reference to the kinds of ratios that Paul had been talking about, and I know there's a reason for that, but I'd like you to explain to us what it is.

DR. ELAINE BUCKBERG: Well, if I were looking at a fraudulent conveyance case, I'd view the discounted cash flow valuations as authoritative as tests. I'd certainly view financial ratios as helpful and supporting, but because a ratio, a ratio is a snapshot of part of the question. A valuation is sort of a full analysis, so I would view the valuation as more powerful and the ratios as helpful, and they're easier then to capture. You can capture them at lots of points in time. It can help guide you and support something, but they're not sufficient.

JEFFREY L. BALIBAN: They really do dovetail to I think even a greater extent, and that is in calculating the discounted cash flow, you're forecasting cash flows, and then discounting them, and that is a risk-adjusted discount rate. Well, how do you adjust for the risk? You have to look at the financial statements and you have to look at these various ratios, and not solely the ratios, but lots of issues that are going on in that firm, in the economy, a whole variety of issues that would be taken into consideration in order to come up with an appropriate risk-adjusted discount rate. Is that effective cash flow stream riskier now as a result of all liquidity problems, other solvency issues? I would say if you have a forecast of cash flows, and you're looking at a company with a debt-to-equity of say ten that might be less risky than if you're looking at another company, or the same company several years down, where its debt-to-equity is now 30. Now you have much more debt as opposed to equity. And so the ability of that company to obtain outside funding, as Elaine had mentioned, you may be negatively cash flowing, but you're not insolvent if you can obtain outside funding. Well, the chance of that has now been deteriorated, and you know that because you've looked at these ratios and you've seen how they've moved over time. So that might translate for an increased risk, which translates to a larger discount rate, which translates to a lower discounted cash flow, which could indicate insolvency.

PAUL HINTON: Furthermore, building on that point, Jeff, the scenario modeling that Elaine mentioned, which is part of that discounted cash flow analysis, you can imagine with this

high debt-to-equity ratio that you've mentioned, Jeff, that there'll be more scenarios in which you had failed to meet those solvency criteria. So it's a different way of saying that the risk is higher.

JEFFREY L. BALIBAN: Right. As we said, a lot of bank and debt covenants are based on specific ratios, so you can get outside financing until you cross a line because your interest coverage ratio, or fixed expense coverage ratio, or debt-to-equity, or whatever your document says, exceeds a certain level. At that point, funding might be cut off. Now you have a very different risk circumstance and a very different discounted cash flow value.

THERESA GABALDON: I think we have time for just one more fairly quick, I hope it's quick, question. And I'm going to direct that to Paul. Do you, on the basis of your research to date, think that the Sarbanes-Oxley Act is doing what it was intended to do, or is it simply too early to tell?

PAUL HINTON: Well, obviously, I can only comment on whether it's having an effect on shareholder litigation, and obviously it was intended to do a lot of other things too, but I think, bottom line is I think it's too early to tell whether there's been an effect on litigation. Certainly, most of the filing rates and the levels of settlements seem to be pretty steady.

DR. ELAINE BUCKBERG: I guess the last point on that is if Sarbanes-Oxley really works, there'll be less fraud committed and in the future, we'll see fewer filings. That's what we should be looking for, but it might take a couple of years to see that effect.

THERESA GABALDON: Paul, Jeffrey, and Elaine, thank you for today's good discussions. I would also like to thank NERA Economic Consulting once again for making today's online program possible. Just a reminder, this online program is now archived in the Society's virtual museum, so you can listen again to the discussion. A transcript of the program will be ready in the coming weeks. The Society's next online program will be a Fireside Chat: "FTI and Forensic Accounting" with James Barratt and Ernest Ten Eyck of FTI Consulting, Inc as the speakers. Professor Donald Langevoort of Georgetown University Law Center will be the moderator. Join us on Tuesday, September 21st, at 10 am, Eastern Daylight Time. Thank you for joining us today.