M&A in the 21st Century and Its Implications*

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The subject of mergers and acquisitions is something on which I've written for a long time, and is included in my new book, 'Deals from Hell'. The lessons from looking at failed mergers are numerous and lessons we can carry well beyond the field of finance: lessons having to do with strategy, with government policy, with organization, structure, with financial analysis, and on, and on, and on. It's an extremely rich topic. I hope every one of you in the room will find some insight that you can take with you, into your work today, and into the future.

The current context of course, makes this an especially timely subject. You may know that there is very deep skepticism about mergers and acquisitions in many circles. This is also a very buoyant moment in the time of mergers and acquisitions. The deal volume for mergers and acquisitions was up 20% in 2005, and in the first quarter of this year, it was up another 20% on a year-over-year basis. Since the US Fed began raising interest rates more aggressively, I expect that the results for the second quarter will be less aggressive, but still we expect to see growth in mergers and acquisitions volume both in terms of numbers of deals, as well as in terms of value of deals. I should tell you that if you want to develop a very critical way of thinking about mergers and acquisitions, you must understand the difference in how we measure deal volume. Numbers of deals give equal weight to all deals, whether they are large deals or small deals, whereas when you look at the values of deals, you are necessarily giving greater weight to the bigger deals.

So what do you think has happened in the last year? We have seen the emergence of a few very large deals. The most stunning deal in the recent 10 days was the consummation of the acquisition of Arcelor by Mittal. You don't need very many of those deals to produce a dramatic spike, a dramatic increase in the value of M&A transactions in each year. So what we're seeing at this phase of the M&A cycle (and it does follow a cycle) is the emergence of very large deals, which will tend to skew the statistics, measured on a value basis. Of course, we know that no region is exempt from

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this increase in M&A activity. Asia you know best. In Europe we've seen a number of dramatic new transactions announced, and Latin America. Now we see the emergence of very strong protectionist sentiment as the different regions now begin to experience the entry of aggressive buyers from outside of their borders.

Of course this comes in the context of the general trend of liberalization of trade and the opening up of markets. And the rules seem to be changing, including the players such as hedge funds, private equity funds and aggressive private individual investors. Some find the entry to these new players to be worrisome. In the midst of it all we see a few very prominent hostile transactions. Now these raise many public concerns. You should know that the public policy concerns raised by M&A could fall into three broad categories.

The first category has to do with the creation of monopolies and oligopolies. Mergers tend to result in the concentration of industries. Viewed from a different perspective, however, the creation of these very powerful companies may have desirable public policy outcomes in the creation of "National Champions": Companies that will compete very vigorously with other companies on the global stage. Europeans are experts at the creation of National Champions. But I will tell you, however, that the record of National Championship is quite mixed. It is no formula for national success. National Champions get forced together, and it is not clear that they are necessarily stronger or more effective or more efficient as a result.

The second big public policy area is of course dealing with efficiency. We all know that more efficient companies, more efficient industries, and more efficient countries create wealth for the population. As we say in the United States, "A high tide floats all the boats." So the more efficient companies are, the better tends to be the welfare of the entire country. So we need to ask the question, will this Merger and Acquisition activity enhance the efficiency of companies and industries and our own country?

The third area is, of course, looking not merely at wealth creation; it looks at how the wealth is allocated. Who wins, and who loses, in these transactions? For instance, let's look at hostile takeovers, which I know is a topic of interest to you. I should tell you that most takeovers are not hostile. There can be friendly takeovers, there can be unsolicited bids, and then there can be hostile bids. About 1% of all bids are unsolicited; 99% of offers are solicited in the sense of being initiated with the consent of the target

company's management. So we're talking about a very, very small fraction being unsolicited--and a third of those unsolicited bids are hostile. And you should know that most hostile takeover attempts fail. 45% of the time, the target remains independent. 30% of the time, a friendly firm buys the target. And in only 25% of the time does the hostile buyer succeed. Still, even though the success rate is low, we should ask ourselves, why not put in place poison pills and golden shares to enable companies to defend themselves better?

Well let's return to the three criteria that I showed you. How do these defenses affect our ability to manage monopolies and shape industries for industrial policy purposes? Well, the golden share is an ideal instrument. It was invented during the prime ministership of Margaret Thatcher of the U.K. The first recorded golden share was used in her privatization of British Petroleum; I think the year was 1982. Since then, virtually all privatizations of state-owned enterprises have included a golden share provision. Why? The reason is that often the state-owned enterprises have formal or informal understandings with large labor unions. The ability of the government to intervene in the policies of the newly private company is one way of assuring the unions and workers that their welfare will be considered by future decisions to be taken by the board of directors of the newly-private company.

A golden share is literally one share of stock owned by the government that has superior voting rights. It carries with it a veto over certain kinds of policies and actions by the company. These are very powerful instruments for shaping industrial policy. They are vehicles through which companies can be forced to take some action or avoid other actions. The poison pill is merely a device that permits companies to flood the market with new shares if a hostile buyer begins to accumulate too many shares. So, for instance, if my company has a poison pill with a 10% trigger, and if a hostile raider comes along and buys 10%, I can quickly distribute new shares to the other 90% of the shareholders. This makes buying my company much, much more expensive to the raider than he or she may have thought to begin with.

I've studied the poison pill at length and conclude that the poison pill is extraordinary effective. It is, what we say in the United States, a "showstopper." It stops the attack perfectly. No poison pill in history has deliberately been triggered. It is so effective. Once a company accidentally triggered its own poison pill because the managers forgot about this provision, and doing so created big problems. But otherwise the poison pill

has never *intentionally* been triggered. The lesson there is that you should pay attention to the defenses that you put in place. The poison pill is not a very effective instrument for industrial policy, or for antitrust because all the discretion is vested in the corporate managers rather than the government policy makers. But it's very, very effective as a defensive mechanism.

From an efficiency standpoint, we should be very careful about permitting these defenses. All defenses shelter managers from market forces. Market forces push managers to become more and more efficient. So we must ask ourselves, in the absence of these forces, these pressures on management, will management be as efficient on its own as it would be if these defenses were not in place?

Finally, from a welfare standpoint, these defenses are highly questionable. My research has shown that all defenses are costly. None of them are free. This is a common misconception. It is a great error to think that the takeover defenses are free. They impose a cost on the shareholders of the public company, and they delegate control from the directors to the managers of a company. Now this may not be bad, if the managers of the company are truly shareholder-oriented. But if they are not- if they like the quiet life; if they like the corporate jet, and they like long vacations, and the condo in Hawaii, and other good benefits- if they like to use corporate assets for their own benefit, then these defenses can actually harm the public shareholders.

One should enable these defenses very carefully. They are part of the toolkit potentially available to managers and investors, but I would be reluctant to recommend that all companies in Korea adopt these kinds of defenses. In the United States, we are now seeing a retreat from companies adopting these defenses. The poison pill is frequently a subject of controversy at annual meetings of large American corporations, because investors don't like them. Hedge funds, mutual funds, and large institutional investors, don't like giving management that degree of control.

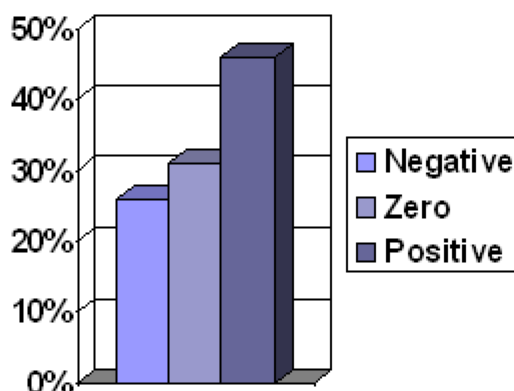
The discussion of welfare aspects of takeover defenses raises the more general question, does M&A pay? Should we prohibit M&A generally, or should we encourage it? This is where my book offers some insight. We can ask whether it pays. Then I said, if it does, what can we learn from very bad deals, and how can we avoid them? And what can we learn for management practice?

The conventional wisdom about M&A is that it is not comfortable; it's distrusted; it seems wasteful; and the big deals, especially, seem very bad. I give you a quotation from one book that came out recently, and in the book the authors wrote, "the sobering reality is that only about 20 percent of all mergers really succeed. Most mergers typically erode shareholder wealth. The cold, hard reality that most mergers fail to achieve any real financial returns... very high rate of merger failure... rampant merger failure...."

Ladies and Gentlemen, I am here today to tell you that that is wrong. That is conventional thinking around the world. But it's wrong. The research is quite inconsistent with this conventional view. I looked at large-sample empirical research. We now have hundreds of studies based on data in the United States, Asia, Europe, and Latin America. We now have clinical research on M&A failures, clinical research on successes, various government investigations, bankruptcy reports, memoirs, and journalistic summaries. All of these tell us what <Figure 1> suggests. The graph summarizes what we know that this is the return to the buyer's shareholders.

<Figure 1>

Returns to Buyer's Shareholders



We know that the target shareholders gain. If there's one consistent place to make money in mergers and acquisitions, it is to be able to sell your company again and again and again. Of course, I'm joking, in a way, because you can only sell your company once, but the shareholders of target companies earn a very sizable premium in takeovers.

The large question is, what about the buyers? This graph presents the buyer's point of view. We find that about 25% of the buyers lose, about 32% of the buyers break even on their deals, and the balance, and about 43% actually earn a profit.

So if you look at the entire population of M&A transactions, you would conclude that M&A does pay. My book summarizes a very large body of academic research. But I go on to tell you that it's not worth betting your career or your personal wealth on the success of an individual transaction, because there's quite a lot of variance in returns to buyers in M&A. Are you really willing to sustain a 25% chance of loss?

I go on in my research to identify neighborhoods of profit and loss in mergers and acquisitions. And this leads me to the large recommendation, or the large insight, that all M&A is local. What does that mean? It means that it does not pay you to make judgments about the entire population of transactions. What you really need to do is look at the conditions specific to a given deal. I took this phrase, "all M&A is local," from one of the prominent politicians of the United States in the mid [1980s]; his name was Tip O'Neill. And he was Speaker of the House of Representatives, and at the time he was trying to explain to someone why government policies are so hard to understand. And this someone was saying, "You just need to attend lots of embassy parties and receptions, and read the right government reports." But Tip O'Neill was saying, "No, no, no. You don't understand. If you really want to understand what is happening in the world of politics you must go out to the districts from which the senators and the representatives are elected. You must talk to the people in the school boards, town halls, and the police precincts, and you would get a much more accurate view of the political forces at work in the environment than you would get by talking to people within the national capital itself." So Tip O'Neill said, "All politics is local." If you understand the local forces then you can really understand the national forces.

My message to you is that all M&A is local. If you want to understand mergers and acquisitions, look at the subdivisions- look at the neighborhoods, as I call them. <Figure 2> makes a general point. Over hundreds of studies, we have identified neighborhoods where M&A consistently does pay, and other neighborhoods where M&A consistently destroys value. The column of words on the left consists of neighborhoods where value is created. The column on the right is neighborhoods where value is destroyed. There are eighteen dimensions here and if you look at the bullet points very carefully, you will

see that they are ends of an extreme, they are polar conditions. I won't read all of these to you, but I will just say that I'm sure these will appeal to your intuition.

<Figure 2>

M&A is Local: Adjusted Returns to Buyers by "Neighborhood"

Returns to buyers likely will be higher if:

- Strategic motivation
- Value acquiring
- Focused/related acquiring
- Credible synergies
- To use excess cash *profitably*
- Negotiated purchases of private firms
- Cross borders for special advantage
- Go hostile
- Buy during cold M&A markets
- Pay with cash
- High tax benefits to buyer
- Finance with debt judiciously
- Stage the payments (earnouts)
- Mergers of equals
- Managers have significant stake
- Shareholder-oriented management
- Active investors
- Big good deals

Returns to buyers likely will be lower if:

- Opportunistic motivation
- Momentum growth/glamour acquiring
- Lack of focus/unrelated acquiring
- Incredible synergies
- Just to use excess cash
- Auctions of public firms
- Cross borders naively
- Negotiate with resistant target
- Buy during hot M&A markets
- Pay with stock
- Low tax benefits to buyer
- Over-lever
- Pay fully up-front
- Not a merger of equals
- Managers have low or no stake
- Entrenched management
- Passive investors
- Big bad deals

To take an example, the third bullet point down says that if you buy businesses in related industries, you will do better than if you buy businesses in industries that are unrelated. This is one of the core findings of merger and acquisition research. It tells us that if you know what you are doing, you will probably succeed. But if you diversify outside of your area of expertise, you stand a much higher risk of failure.

We have another example of cold verses hot M&A markets. If you buy a companies in cold markets, the times when M&A activity is low, and the prices are low, you'll tend to do better deals; you'll tend to make better money than when the market is hot, when people are paying very high prices and there's lots of competition. We see an example of paying with earn-outs is consistently associated with creating value for you as a buyer, verses paying completely upfront. The more you can spread out the payments according to some formula, the better off you will be. My point is merely that the field of M&A is fraught with areas of success and areas of failure.

As part of my book, I studied the returns in the extremes- the very best and the very worst deals. My study showed that the very best deals were deals characterized by

strategic relatedness, by cooler market conditions, and deals where the buyer was strong; where the buyer actually brought something to the party. The worst deals were just the opposite: Low strategic relatedness, market conditions were hot, and where the target was strong and the buyer was weak. This third dimension, strength, is a very interesting one. It basically says that if you bring something to the transaction, the odds are that it will go well for you. If you are, however, acquiring companies out of weakness, the odds are that you're going to make a mistake.

There's been quite a lot of discussion in all the major markets about the very biggest deals. I mentioned Mittal buying Arcelor. Are these good or are these bad? The popular perception is that most of the biggest deals are bad. I think this reflects our preoccupation with political power, that big companies tend to have too much political power, and that the big deals are done for the sake of that power, rather than for economic purposes. I looked into this as well, and I found that large deals tend to coincide with hot market conditions, when stock was used as a form of payment. So I used an econometric technique to control for the form of payment, and I found that indeed that size is not a driver of returns at all. It's entirely due to the market conditions and the use of the form of payment. My message to you, those of you who have an interest in public policy, is that size should not scare you. Large transactions should not scare you. Size in itself is not the same as efficiency. We should be promoting mergers and acquisitions; again, from the standpoint of general welfare, we should be promoting these transactions to promote efficiency in our economies.

Of course hot markets are very much a concern these days, given what I was telling you about the volume of M&A transactions. Companies tend to overpay, they experience negative returns, and they become the workshops for big failures. What you see in hot market conditions, are very high prices, very big deals, and naive and inexperienced buyers entering the market. You see very aggressive financing, over-optimism. I don't think we're there yet. But as critical thinkers, managers must always ask whether they are doing deals because the deal is justified on its own, or because of the general condition of frenzy for mergers and acquisitions in the market today.

One of the interesting features is that all of the deals from Hell that I looked at in my book were done in hot market conditions. What do I mean by a "deal from hell?" I offer six dimensions. A deal from hell destroyed immense amounts of value. It left the company financially unstable. It impaired the company's strategic standing versus its

competitors. It impaired the company's organization; the company lost the best talent and the future generation of leadership in the company. The company's reputation was damaged; the brand name suffered. And in many of these cases there were violations of ethics and laws.

I give you the ten case studies that form my book. Of the ten, I looked at two cross-border deals, including Sony's acquisition of Columbia Pictures, and Renault's proposed merger with Volvo. From the ten in depth case studies, I distilled six factors that help to explain why we ever see deals from hell. These are the key points I would leave with you this morning.

First, the deals from hell tend to occur in very complex settings. The companies are complicated, making it hard for executives to know what is going on.

Second, within the company there are few firewalls or buffers or shock absorbers. Trouble, as a result, can spread. If the company encounters difficulty is some part of its operation, the absence of these firewalls or buffers or safety stocks permits that difficulty to radiate throughout the rest of the organization. We see this in deals that are very, very heavily leveraged, where debt is used to finance the deals. We see them where there is very little time to remedy the problems, or where there is a path dependency.

Third, management in all these deals from hell made some kinds of decisions that elevated the risk exposure of the company. An example of this was in Quaker Oats acquisition of Snapple. The company chose to abrogate contracts with suppliers and distributors in an effort to promote greater efficiency, but they did it without having an alternative plan in place. This led to extraordinary turmoil within the company that ultimately brought the management and the entire company down.

The fourth driver of disasters is "cognitive bias," or bad thinking such as over-optimism; deal frenzy, the desire to get the deal done at any cost.

Fifth, things don't go as planned. So you have a very complicated company, with very few safety buffers, management does things that raise risk, management was overoptimistic to begin with, and then trouble breaks out. I identify a range of sources of trouble such as an extraordinarily bad snowstorm, which shut down two merging

railroads for three weeks, and prevented the new company from generating sufficient revenues. In other cases, it was rising interest rates, stock market crash, sudden changes in consumer tastes, or technology. When you look at this list, you would say, "that happens all the time!" But that's my point. Trouble is always with us. The big issue is, are you ready?

Sixth and finally, the operational team on the forefront responds inappropriately. In some of the deals, the managers took too long to respond. They denied the very facts that were appearing before them. They insisted that things would get better very quickly. In other cases the managers overreacted creating other problems. There can be unethical behavior. The worst deal in my book was the acquisition of Time-Warner by AOL. It was the largest deal in American history, and to this day, takes the honor of destroying the most value, about $200 billion dollars. The unethical behavior that emerged in that deal was the invention of transactions between the companies (lawyers call this fraud) that would generate revenues for both companies. This was an attempt to make things look better than they actually were. Of course, when things began to break down, people began to fight, operating rivalries emerged, and cultural differences were amplified.

So what do we take from this? My argument to you is that these massive disasters result from a perfect storm of factors. If these six factors come together, look out. So you must be storm spotters. You must be very carefully attuned to what's happening in the two companies. Rarely are any two mergers alike, so no two perfect storms are alike. You need to become good at recognizing the conditions of failure. Second you need to attack the system of failure; it's the convergence of these six factors. If you can avoid these six factors, from coming together to form the perfect storm, you can probably prevent the disastrous outcome.

To be more specific, let's borrow a concept from the field of manufacturing safety, called the high reliability organization. Such organizations exist where there is danger to human life, and the best of these organizations show four characteristics: A preoccupation with failure: they know failure is nearby, so they are very, very attentive. Second, they show a continuous sensitivity to danger, so they are very good at monitoring conditions. Third, they show a commitment to the resilience of response, so they don't try to use the same method of responding to the problem today that they used yesterday. They are very adaptable to new conditions. And finally, they let the people on

the frontlines make decisions to fight the problems, rather than waiting for permission to come from up above and come back down in the organization.

My advice is to take a view of M&A enlightened by research—the widespread and consistent finding is that M&A *does* pay. They are a method of industrial renewal and transformation. But one should be very careful in promoting these transactions. A good strategist knows that all M&A is local. You must choose the right neighborhoods, you must choose them very carefully, and you must choose to manage them very carefully to prevent the perfect storm.

I close with a thought. My book gives an example of where a research university can make a good difference in professional life. Here I am, a professor. At one point in my career, I was a banker. I did help finance a few transactions, so I've seen them up close. But really it's fair to ask, what can a professor or a university say that can make the world of practice be better? The answer is that scholars can bring a fresh perspective, a critical point of view for examining conventional wisdom. We bring rigorous methods of assessment. We help to synthesize across many kinds of evidence, and from that we induce new ideas or practices.

So my message to you today is really covering many points: mergers, acquisitions, the role of research universities, and defenses. I hope that these have given each and every one of you something that you can take with you into your work, but I thank you for the honor to speak with you this morning.

Questions & Answers

[Q] Was there any studies that look at cross border transactions in particular?

[A] There are numerous studies that look at cross border mergers and acquisitions. And what we find is that the premiums paid for target companies are even higher when the buyer comes from a different country. And we find that the propensity to lose money is even higher when you are the buyer entering a foreign country. But all M&A is local, so there will be exceptions. The exception is that companies who enter, who cross borders, consistently make money when they bring strength, first in the form of new technology-

technology transfer should be no surprise to you; technology transfer is one of the consistently reliable ways to make money through cross border M&A. -and second, through the transfer of know-how. Technology refers to patents and engineering techniques, but know-how could be many things. It could be Wal-Mart extending its expertise on inventory management. It could be a company that's very good at brand management to extending its expertise to a foreign area. This goes back to one of the points I was making in my talk that if you as a buyer are bringing strength to a cross-border deal, the odds favor that the deal will go very well for you. But if you're doing it just out of weakness because you have run out of places to invest locally in your home country, or even worse, if you are doing it out of sheer opportunism, then the odds are quite likely that you will destroy value.

[Q] How do you calculate the value of target companies? What are the main factors in how you calculate them? Are there any general factors you can mention?

[A] I love this question; it is a question of how you value companies. It is a question of universal significance in business and finance. We should want to know the answer to this question not merely to make better mergers, but to make better investments generally, and frankly, to manage our companies better. Because if we can value our company under different strategic scenarios we can decide which strategy is the highest-valued strategy. So it all begins with how to value companies.

That is the easy part of the answer, but the hard part is that there are numerous ways to value companies. They all have strengths and weaknesses. In my book, *Applied Mergers and Acquisitions*, I describe them all; at least I describe nine different approaches. My recommendation is to use as many as you can. Each approach conveys some special information. And then I suggest that from all of those different valuations that you triangulate into an estimate of what you think the target company is worth. 'Triangulate' is a word in English drawn from surveying. When you survey land, you identify the boundaries of land, and surveys use the principle of geometry that if you know the length of one side, and two angles, then you can describe everything about the triangle. So surveyors do what they do using triangulation. My argument is that in finance and business should use triangulation as well. We should use many points of observation. And then we have to decide. The method I like best is a method that I see used in the best-practiced companies around the world. It is called discounted cash flow. It simply

forecasts the cash flows that you expect the target company to generate, and you discount them back to the present using a rate of discount consistent with the risk those cash flows.

[Q] What would be the most effective and efficient consolidation management after the merger and acquisition?

[A] This is a profoundly important You should all know that simply negotiating a good deal is only the beginning of the challenge. An area of M&A concerns itself with the integration of the two companies, after the deal is done. You can have a great deal, meaning a deal struck at a very advantageous price to you, but the deal can still fail, if the two companies fail to integrate effectively. I have studied some of the best-practiced corporations, and I will give you just a few points of what we know from them, but it is a field that is still evolving. As you might guess, first and foremost, companies that do M&A transactions often tend to be very, very good at integrating target companies. Companies that do transactions very infrequently tend to have serious problems integrating companies.

So integration becomes a strategic competence, a skill that you should try to develop within your company. And, of course, practice makes perfect. The more often you acquire companies, the more likely you are to develop the skills that make integration successful. What causes integrations to fail, among other things, are fears among the employees; fears about whether they will still have a job, who they will report to; will they have to move; what will change in their lives. So the best advice always begins with trying to complete the integration as fast as possible, because it is this uncertainty during the period of integration that poses the greatest danger to your companies. For instance, your most talented employees may feel disrespected, they may feel under-appreciated, and they may feel at risk for their jobs. So the most talented people leave first during a long drawn-out merger integration. You need to move very quickly to retain your most talented people. Similarly: customers. In integrations, you find a great deal of confusion inside the combining companies, and this confusion tends to interfere with a very high level of customer service. The customers start to feel that they are being neglected; that the company isn't really looking after their interests. And then the customers defect. And just like the employees, it's always the best customers who defect first. We could go on and talk about suppliers, we could talk about union relations, and we could talk about R&D, research and development programs and innovation efforts.

But if you pause for a moment, you will see that during this period of integration, the company is at great risk in so many ways. So "do it fast" is the first and best advice we can offer.

[Q] In your studies, did you find any difference in regards to successes and failures between financial firms and manufacturing firms?

[A] The probability of success is higher in banking and finance. The reason is that these are industries with barriers to entry, and they are protected by regulatory agencies. As a result, the companies tend to be healthy. And we know that there are enormous economies of scale in certain operational aspects of financial institutions. So these mergers exploit the economies. Generally speaking, bank mergers pay, and they pay better than mergers in manufacturing. The truth of this is that in virtually all countries around the world is that the restriction into the banking sector has been so high that it has created a very favorable condition for economic results in bank mergers. If entry into the financial sector were as easy as is entry into manufacturing sectors, I think the success rate of bank mergers and acquisitions much lower than it is. I don't want to say that banking has zero risk. But it is, I believe, a lower risk than manufacturing mergers.

[Q] Which states in the United States allow the issue of golden shares? What is the general practice in the United States?

[A] To my knowledge there is no golden share at work in the United States. The government has privatized some operations, but has not retained a golden share in any company in the United States. The poison pill is permitted throughout the United States. There's no legislation that permits the poison pill, but in the United States we have a common law system, and if you have an idea like a poison pill, you try it, and if the courts approve, then it gains the force of law. But the courts have been very friendly to poison pills, much to my surprise and the surprise of many economists. The reality is that we have a very vigorous climate of shareholder activism presently in the United States. These active shareholders- many of them are very sophisticated, many of them represent large institutional investors, and some of them represent hedge funds and very wealthy individuals. They are fighting battles company by company to get the companies to withdraw their poison pills. We have seen some notable examples this year of companies that withdrew poison pills. But it's a very slow process. I think the poison pill is here to stay, and we must live with it.

[Q] In the media and distribution industries, have there been any successful attempts at mergers following the digital convergence model? If not, why do companies continue to attempt these mergers?

[A] You've picked a great industry; an excellent example for us to discuss strategies for M&A. My view is that the merger between a content producer and a distributor like an Internet company or a cable TV company. This is what we call a vertical combination. Horizontal combinations are mergers between peers in an industry: Two coal companies, or two shipping companies, or two steel companies. All of the research shows that the most money to be made in mergers and acquisitions is in horizontal transactions. The next most money to be made is in vertical transactions, and the least money to be made is in unrelated, or as we say, "conglomerate" transactions.

So the question is in some cases these vertical transactions succeed, and in some cases they don't; why have they not worked out very well in media? Your point is exactly correct that the failure rate is really very high. I think that investors looking back over the past ten years would have to express great disappointment at what has happened. The theory was that there would be a convergence between the content and the channels. There would be a convergence between many different media, the Internet and cable being a prime example. And that therefore, by creating these large combinations you would exploit synergies, economies of various kinds.

What happened was that the synergies never emerged. The Internet space has yet to prove the attractiveness of the model that you can actually make money by selling advertisements on websites, for instance. A few companies are making money at it, but by and large, it's still a very young field. It's too early. And if you think about it, there are almost no barriers to entry in the Internet space. We know that very high rates of return come from market positions that exist because of barriers to entry. If there are no barriers, where is the money to be made in the Internet space?

I truly believe that the significant money is made, first in the generation of content, secondly in the distribution of that content in very restrictive ways. So I think that in theory, a cable company combining with a content producer could succeed if the cable company has access to a portion of the viewing public, and in effect owns that public, then I would still be optimistic that there are some attractive returns to be made. But the

issue is not that the cable company owns those companies, it's that the cable company is competing with the Internet, with satellite TV, and with free broadcast television and the like. We have seen such a rapid rate of technological development and deregulation in media that it will be years before we can determine for sure who owns the relationship with any particular customer. For those reasons, the marriage between content and distribution has not worked. In conclusion, I think those failures are more a result of bad timing than they are of bad strategic concept.