

Securities and Exchange Commission Historical Society
Interview with Rick Ketchum
Conducted on August 25, 2008, by Kenneth Durr

KD: This is an interview with Rick Ketchum on August 25th, 2008, in New York City, by Kenneth Durr. Last time we got to where you were wrapping up your experiences with the Securities and Exchange Commission. We didn't talk about your decision to leave the SEC and go to NASDAQ.

RK: Well, I had been at the SEC for almost 14 years. I served a number of Chairmen. And it seemed to be the right time for me to take on a new challenge. The NASD—which at that point owned NASDAQ and was all together as a single piece of both a self-regulatory organization and the owner of the NASDAQ stock market—came as a perfect way station for leaving the SEC. I had worked for some time at the SEC with Joe Hardeman, and liked him and trusted him. The NASD offered a chance to pursue both of my passions, with respect to markets, from the standpoint of being actively involved in growing the NASDAQ stock market; and also with respect to self-regulation and regulation generally. So it was kind of a nice way station for leaving the government, but still pursuing a lot of the issues that I cared a great deal about at the SEC. And it had the third benefit of being in Washington and not dislodging my family. I had three relatively young kids.

So those were all reasons for my decision. I don't think there will ever be a time in my career that I enjoyed anything more than I did at the SEC. But with three children and the rest, it does make you somewhat aware that the time's probably going to come where you will be required to make a little bit more money than you can make in the government.

KD: Right.

RK: So the NASD offered what seemed like the perfect opportunity from that standpoint.

KD: Now did you talk to Frank Zarb when you went in there?

RK: I did not. No. Frank was not at the NASD at that point. Frank came into the NASD in the mid-90s when, really, I became most close with him and he became an important person in my life. I had known Frank through his time with Smith Barney, where he was the senior person in the Smith Barney organization, all part of the Sandy Weill organization that eventually acquired Travelers and then Citigroup, etc., and later in on my career, I did a full circle and landed in. But in the early 90s, Joe Hardeman was the CEO of the NASD.

And so the early years of the NASD, most of my responsibilities were on the market side. John Pinto was responsible for running the regulatory program. I was sort of the liaison

to that program from Joe since I had a lot of interest in the regulatory issues, and I was responsible for, generally, the legal function with respect to the NASD. But most of my time was spent with respect to NASDAQ, and it was an exhilarating time in the early 90s. NASDAQ had operated, really, as a way station for companies for years until they became large enough to list on the New York Stock Exchange. Gradually, however, as more and more trading became electronic, and as a result of Commission rule making that occurred while I was in Market Regulation—among others, requiring more accurate and open quote reporting, and requiring last sale reporting; NASDAQ had taken on many of the outward attributes of the exchange markets. The greater transparency resulting from real time trading reporting gave it an ability to have a level of legitimacy as a competing market to the New York Stock Exchange, and really allow it to dominate its competition with the American Stock Exchange for smaller growth companies over the period in the 70's and 80's. NASDAQ really blossomed in the 80s, and by the beginning of the 90's NASDAQ had more of an opportunity to compete with the New York Stock Exchange, and for the first time an ability to start to retain its largest companies, which again, as a result of the first technology boom in the United States in the 80s, were some of the most notable companies in, not only the United States, but the world. Specifically, NASDAQ was able to retain Microsoft, Intel, Apple Computer and Cisco. Whereas before, they would naturally have moved to the New York Stock Exchange.

And while many other companies still naturally moved, and the New York Stock Exchange had by far the majority of the large capitalized companies and the most recognizable companies, NASDAQ was able to hollow out a niche with respect to technology companies, probably for a couple reasons. One, NASDAQ was perceived as more of a technology marketplace in that it was an upstairs trading environment with electronic quote and last sale reporting, whereas the New York Stock Exchange was perceived differently, notwithstanding all the technology it offered, because it was very much operating from that point on a manual floor basis. And also, the technology companies had a bit more of a maverick feel. They viewed themselves very much as discrete innovators, and given their growth and importance in the United States at that point they didn't feel that they had any need to graduate to the New York Stock Exchange. They also had a certain level of pique that the New York Stock Exchange listing standards had not allowed them to be listed at the beginning, so they had a perception that NASDAQ was there when they needed them.

Something that was quite controversial at the time in the early 90's—NASDAQ began an aggressive set of television advertising, really the first time any marketplace in the U.S. had done much television advertising. Their television advertising tried to associate NASDAQ as a technology exchange, and also tried to associate it with its largest companies. So there was very much—and this was greatly to Joe Hardeman's credit—a feeling of partnership between these large technology companies and NASDAQ. And it positioned NASDAQ to be more competitive from the standpoint of issuer listings. And in some degree, that happened naturally just because the large technology companies kept getting larger. You're still, at that point, 10 years before the technology bust, but the 90's was an extraordinary period for growth of technology companies overall.

It also was a tremendous growth period from an IPO standpoint. The NASDAQ index, perhaps particularly in the second half of the 90s, consistently outperformed the market as a whole and the Dow and the S&P. People mumbled a lot of nonsense—they mumbled about new paradigms and the like with respect to dramatic de-coupling and what was reasonable from an earnings-per-share standpoint. And what was reasonable from a standpoint of expectation of what continued growth would be with respect to companies as they grew and matured. And the last piece was visionaries saw the enormous potential of the Internet without stopping to spend a lot of time thinking about the fact that while that potential was there, not all companies that initially got capitalized would end up succeeding. And that one of the great beauties of the Internet was very, very low barriers to entry, and with that, a very highly-competitive environment.

So you had a feeling throughout the 90s of a period of euphoria, a period when NASDAQ really grew in reputation, particularly in the early 90s. And at this same time, we were hard at work in trying to improve the underlying infrastructure of how NASDAQ worked. And this was a matter of significant concern with the SEC that led into probably my toughest period at the NASD in the mid-90s, but I'll get to that.

KD: You talked a little bit about the fact that in some respect, NASDAQ was fortunate to have this stable of tech companies, and you talked about this growing esprit de corps. What kind of concrete steps could NASDAQ take to make these companies happy and to keep them in the stable?

RK: Well, it's interesting. The most concrete steps for these companies, given the fact that they were steadily increasing in price, was a perception of partnership with the exchange, both in perception in branding that they were high-tech companies—NASDAQ at that point, attempted to brand itself as a technology company and a technology market. And secondly, a perception of partnership from the standpoint that part of the way NASDAQ strove to get that perception of a high technology market was to, essentially, advertise and brag about its largest companies, and try to couple its perception of its entrepreneurial spirit with their entrepreneurial successes. So much of NASDAQ's advertising featured those companies.

The other piece that those companies liked was the market structure difference of NASDAQ at the time versus the New York Stock Exchange. Those companies were often going to the marketplace raising new capital because they were growing so quickly, and because they were so successful from the standpoint of seeing price rises. So they liked very much the concept of competing market makers, which NASDAQ was built around. And they had a perception that being part of NASDAQ and having those competing market makers also be their most important investment bankers was valuable to them because they were regularly going to the marketplace from the standpoint of raising new capital too.

KD: Can you quickly tell me about the concept of competing market makers, and how that fits with tech stocks?

RK: Sure. The New York Stock Exchange today is very different than it was then, but was based fundamentally around a single specialist that had various regulatory restrictions around them that, while they could be part of a holding company, had to have very significant barriers with respect to how they operated and everybody else. But it was a single, if you will, monopoly specialist operating to provide both market quality and liquidity, and specialists had a variety of particular obligations to the market. NASDAQ provided a competitive model in which there were much lower barriers to entry for each market maker. No market maker was assigned a particular stock. Any market maker could register to trade any stock, and their only regulatory requirement was to continually quote a two-sided market in the security. And then the market structure was built on an expectation that those market makers, as a matter of business competition, would step up and provide liquidity. And, as I say, the large technology companies who are looking to raise capital and who are looking to have relationships with these firms, many of whom were both market makers and investment bankers, found that structure very attractive.

So as I said, we began effecting changes in the early 90's because we recognized there still was a significant gap between NASDAQ's reputation and in what it needed to do from a market structure standpoint to make its market more open and fair for investors. NASDAQ had grown to have good price transparency and quoting transparency, but it still did not have the same treatment and protection of public limit orders that existed on the New York Stock Exchange. There was, in the early 90's, no requirement that public limit orders be displayed in the market. There was no requirement that market makers not trade in front of those public limit orders, that they give priority to those public limit orders; again, a fundamental requirement of the New York Stock Exchange. So we began the process of, step-by-step, trying to improve the treatment of public orders in the marketplace at the same time that the SEC's Arthur Levitt became SEC Chairman and became quite concerned with those issues as well.

We worked with the SEC first to adopt a rule and then amendments to a rule that are generally referred to as the Manning Rule, that for the first time prohibited NASDAQ market makers from trading in front of a customer order. For example, if a customer order was priced at \$5, NASDAQ market makers could not trade at \$5 without making sure that the limit order got executed first at that price. A basic concept, but something that had not previously been required. The underlying rationale for not imposing such a requirement on market makers was that NASDAQ was in the theory of a market for developing companies, where there was a need for market maker sponsorship. This had not been part of the market before; the concept was that you needed loads of incentives for market makers to participate in the marketplace.

Well, we were now talking about trading in some of the largest companies in the world, like Microsoft, Intel and Cisco, and that was just nonsense from the standpoint of how market makers should treat public limit orders. So that was really the first step to beginning to go past trading quote transparency to making NASDAQ an equivalent market to the New York Stock Exchange from the standpoint of public order protection. The next step we believed was to move to a publicly displayed book in which limit orders would be displayed. We began that process by proposing to the SEC a voluntary public

limit order display book in the 1993-1994 period of time. Unfortunately, we didn't get to the point of really moving that market structure quickly enough for a variety of reasons, and we ran into what became a very significant investigation by the SEC and the Justice Department in the mid-90's of the NASDAQ market with regard to both antitrust issues and, generally, issues about inappropriate quotation collaboration among market makers. It had been our perception that we could address these issues in market structure, but we were not aware of some of the informal practice fixes that had developed in the market, that were outrageous. Accordingly, we believed that, if we freed the market from the standpoint of having a public limit order book, we would create the right competitive environment that would improve the treatment of customer limit orders.

What became clear from the SEC and the Justice Department's investigation was that there had been developed a lot of informal practices in the NASDAQ market, some of them done, perhaps, with good intentions, some not, but the result was a variety of informal practices that did not encourage NASDAQ market makers to aggressively quote and compete with each other. And, specifically, did not encourage NASDAQ market makers to represent public limit orders in the marketplace.

KD: The odd-eighths was one?

RK: The odd-eighths was the study by Christie and Schultz showing that market makers did not, on a regular basis, quote an odd-eighths, was really the study that was a primary focus in kicking off that review by the Justice Department and the SEC.

KD: So at this point, did you shift gears and focus on responding to these things that were coming up then?

RK: Well, it was a hard and frustrating two years because, really, the progress towards NASDAQ moving into a public limit order display environment was held up as the SEC and the Justice Department completed the investigation. It was a period of time that was very difficult because it did show that market makers had been collaborating, had been not aggressively quoting as they should have, and the SEC and the Justice Department were absolutely right to bring major actions at that point. So you had a period of slowness with respect to progress in the market, and a very difficult period from the standpoint of the NASD and introspectively looking at itself, because we hadn't found this behavior, and we had thought we had a problem that needed to be solved by market structure, and yet, there was both a problem in market structure and inappropriate collaboration among market makers. And it was, truly, a very difficult period.

KD: Did you do a systematic review of yourselves at that point?

RK: We did. We did it through a third party review by former Senator Rudman, who provided a report that formed the basis of changes to the structure of the NASD that then was formalized in our settlement with the SEC at the same time that the NASDAQ market makers settled with the Commission. This was, by far, the most difficult two-year period of my career. The thing I felt best about it was what we came out of at the other

end of that, which was a completely different organization and design of the NASD. It was the moment in which we created a separate and independent regulatory program to ensure that there was no question that business interests would coincide with it.

I was fortunate enough to recruit Mary Shapiro to run what was then created as an independent subsidiary of the NASD called NASD Regulation. NASD Regulation in that first design had its own board and operated mostly independent of the rest of the NASD. This was also the time, to your question, when Joe Hardeman retired and Frank Zarb came in to run the NASD.

And I, basically, operated working with Frank in trying to redesign the NASDAQ stock market on the other side of this tough two-year period. And then, because of my regulatory background I was the primary liaison with Mary Shapiro in the new independent NASD Regulation. I think NASD Regulation, operating as a truly independent entity, dramatically enhanced with Mary's great leadership, the reputation of the NASD. It's a pleasure to see how NASDR has evolved from there to where it is today, through the merger of the NYSE Regulation's Member Firm Regulation program to become FINRA, the largest self-regulatory organization in America.

On the other hand, the NASDAQ market really took the steps that we tried in the early 90's, but had been delayed because of the investigations, to finally step forward as a modern marketplace. That came, in part, by the SEC's adoption of the order display rule, which required that all limit orders be displayed, both on NASDAQ and all the exchange markets. It came with the expansion and shift of trading systems, and really the merger of a system called SOES and a trading system called SelectNet into, in a variety of stages, into turning NASDAQ into a more fully automated market where all orders coming into the system received automatic executions. Between the development of an order exposure rule for limit orders and NASDAQ moving into a fully-automated environment, you really eliminated most of the ability for market makers to sit on orders or to take inappropriate action with respect to it. So NASDAQ, as a result of all those things, emerged a very different animal at the end of the 90's than it had been in the middle of the 90's, a marketplace that did a far better job in displaying orders, was extremely efficient from the standpoint of automatic executions and with a completely independent regulatory oversight.

KD: The thing that it raises is the question of whether the scandal in the mid-90's didn't create more impetus behind a wholesale restructuring than would have been there before.

RK: Absolutely. It would've taken far more years for NASDAQ to evolve into a fully-modern marketplace, and a marketplace that had great protections for investors, if it weren't for the scandal. The scandal was terribly painful. But what resulted in the other side was a market environment far better, far more competitive, which integrated what had been the major development of that period in the 90's, which was the development of electronic trading systems, then referred to as ECN's, into the NASDAQ market. These steps really created the basic competitive model that operates today. I think you're absolutely right, that the timeframe for all that to occur would have been much larger had there not been

the investigations. The SEC and Arthur Levitt, as well as the Director of Market Regulation, which was Rich Lindsey, deserved tremendous credit in what they helped us to accomplish. I feel very good about how the NASD and NASDAQ responded at that point to basically recreate our marketplace, create a level of trust, and create a level of regulatory integrity that was far beyond what was there before.

KD: How closely were you working with the SEC at this point?

RK: One of Frank Zarb's great accomplishments, partially because he had worked with Arthur Levitt off and on throughout his life, was that he really did a wonderful job in reestablishing the partnership and the relationship with the SEC. So we worked very closely with the SEC during those years, in particular closely with Rich Lindsey as director and [Robert] Colby as the deputy director during those times. And then as Rich left, with Annette Nazareth as she came in. As the SEC basically moved through a series of rules, it sort of encouraged competition, created the regulatory environment first for the order display rule, for a display of limit orders, then for how automated trading systems would be integrated into the market, and then begin its road toward looking at best execution, first by increasing disclosure, and then of course, most recently as you move into the mid-2000s again, throughout Annette's leadership, through the adoption of Regulation NMS, which was sort of the final word with respect to best execution, encouraging competition in the markets.

KD: You talked about Frank Zarb, about reestablishing a partnership with the SEC.

RK: Yes.

KD: Was there a sense before that that NASDAQ wanted the SEC at an arm's length?

RK: Well, I don't think there was—many of us had worked with the SEC all our lives, and there was good cooperation, but you did get an arm's length relationship in the middle of an investigation.

When the market's being investigated, that's just a reality. So moving to the other end, reestablishing trust, gaining the confidence of the SEC and the new NASD Regulation, and gaining the confidence in how the NASDAQ market was going to operate was critical. Frank did a wonderful job of accomplishing each of those things.

KD: Well, you've talked a lot about the automated trading systems, and I do want to touch on those.

RK: Yes. They changed the world.

KD: You've got SOES, which appears to have been in place around the time of the market maker scandal, right? It was in there fairly early.

RK: SOES was in from 1986 on.

KD: Very early.

RK: As you'll recall from our first side of this oral history, it was a part of the problem in the crash in '87 because at that point, the SOES system was voluntary and market makers dropped out. As a response to that, NASDAQ made the SOES system, which was a small order automated execution system, mandatory after 1987. It went through a difficult period in which traders were able to take advantage of the fact that market makers really had not integrated the SOES system into their systems, and they were each at a significant disadvantage from the standpoint of quick trading activity, from active SOES traders who were trading against quotes and able to take very substantial positions without market makers really being able to control their risk. And that was one of the areas where you started to see some of the retribution concerns that colored some of the problems in the mid-90s that were identified by the investigation. What happened after that was the SEC took steps—rules to really integrate all trading into an electronic environment, and we moved all access of market makers to the market into an automated environment, and SOES, essentially, became a way of trading not just for small orders, but all orders.

And in between, market makers really developed and made both the type of risk controls into their systems and integration into their systems to be able to handle that type of exposure. And the market became much more transparent and much more efficient as a result of that.

KD: Does this get into the Montage and SuperMontage?

RK: Well, SuperMontage was the final effort by NASDAQ to both integrate its marketplace, integrate ECNs, and as well, compete against the ECNs or automated trading systems, because we recognize that if NASDAQ was going to find its role in the market, it had to more effectively display limit orders from the standpoint of building the book we've been trying to build throughout the 90s, and create an environment that was all electronic to connect against the ECNs and avoid the many delays that occurred in being able to access these various different trading systems from the NASDAQ market. And that led to this effort. Unfortunately, the SEC's review of SuperMontage went on for a period of years and declined our ability to combine and link together all parts of the NASDAQ stock market and the ECNs. While we finally received approval of SuperMontage, it took a long time to get there. By then, ECN's had become even more strong from the standpoint of the amount of order flow that was occurring from it and we were able to operate independently from SuperMontage. It became a difficult period for NASDAQ, particularly happening simultaneously with the bursting of the tech bubble to really maintain market share and to effectively compete.

So SuperMontage was put in place. ECNs basically operated first affiliated with other markets and competition to NASDAQ, and then began to become exchanges, or move towards becoming exchanges, with Archipelago being the first example of that. So it was a difficult time for NASDAQ. On the one hand, the market was operating more

efficiently than it ever had before. Orders were being displayed, the market was perfectly transparent, you were able to access liquidity wherever it was on an automated basis, and that worked great, and that was a tremendous contribution to SuperMontage.

KD: And that was just a technological fix, I guess. Is that right?

RK: That was just a technological fix to link all the markets together on a fully-automated, immediate execution basis rather than messaging going back and forth that could take tens of seconds, if not a minute to occur.

But from an economic standpoint, it's a very difficult time for NASDAQ. A lot of delistings, volume went down, the ECNs had taken a significant market share from the NASDAQ stock market, so economically, it was a real challenging time. Now I won't go directly into the story, but efforts began then that were really carried on by, first, Wick Simmons after he replaced Frank Zarb upon Frank's retirement, and ultimately Bob Greifeld. Wick had begun the efforts to try to pull the different pieces of the NASDAQ market back together again by trying to acquire one of the automated trading systems as well as explore mergers with overseas exchanges. Then, under Bob Greifeld's leadership, after the time I had left NASDAQ, Bob did a great job of both buying Brut and Instinet, and basically, pulling a significant amount of the NASDAQ stock market back together into a single entity.

KD: Brut, did you say?

RK: Brut was one of the ECNs, B-R-U-T. As well as Instinet, which was, at that point, the largest ECN. Instinet had acquired yet another of the large ECN's called Island before then. So NASDAQ, basically, through all those acquisitions, basically put its market back together again.

KD: That was after you left.

RK: Yes. We'd begun those negotiations. Bob carried them through. And, yes, when Wick Simmons left, though it had been a fascinating and challenging experience, I decided I really wanted to, again, try to do something different.

KD: Anything, any other initiatives that you undertook while you were at NASDAQ that we haven't talked about?

RK: Well, I guess probably the only notable thing that was occurring during that time was the precursor of what has occurred today with NYC Euronext and with NASDAQ OMX. In Wick Simmons' time, we moved to try to reach a merger with the London Stock Exchange, with a vision of where markets have gone today: global marketplaces operating off of the same technology and being able to compete on a global basis. Because of the deterioration that occurred after the bubble burst from a technology standpoint, that merger never happened. Obviously, the other big event that occurred during that time was 9/11.

I think that the attack on September 11th was probably the most searing event for any of us in the financial markets, and certainly one I'm most proud of NASDAQ's response to, as well as the response to the securities industry and the exchanges. I was at NASDAQ's New York offices that day, directly across from the World Trade Center.

Perhaps the last event I should cover was the spin off of NASDAQ from the NASD because Frank Zarb and the NASD Board determined that NASDAQ would be more competitive if it operated as a public company. Shares in the NASDAQ were sold off to the membership. Accordingly, while the NASD still had ownership with respect to NASDAQ and general oversight, the actual equity ownership from the standpoint of value accretion had been spun off to members of the NASD. So NASDAQ was operating independently, and at that point, I made the decision to move from the NASD to NASDAQ. Frank Zarb asked me to come and be his, initially, Chief Operating Officer, then president of the NASDAQ stock market. Bob Glauber became the CEO of the NASD, and Mary Shapiro stayed as the person responsible for NASD Regulation. And that, again, was, I think, a major event in stock market history because NASDAQ became, effectively, the first public market in the United States, long before the other exchanges went public.

KD: So when the process was begun, you explained this as all being the first in a series of steps to go public.

RK: Yes.

KD: Was that the intention? Was it just the fact that if we're going to expand to the point that we've got to be public?

RK: No, that was the intention. It happened a little slower because of the bust in technology stocks, but that was very much Frank Zarb's vision, a vision that Wick Simmons adopted aggressively after Frank retired. Frank saw some basic truths about stock markets going into the 21st century. First, trading was going to be global. Second, because of the continuing growth of volume, and continuing growth of message traffic, stock markets were going to have to compete from the standpoint of the quality of their technology. Frank strongly felt that the ability to make the needed investments in technology, and the ability to make the investments to become a global exchange could only occur from being a public company.

Frank felt that the ability and likelihood that members would, from a not-for-profit standpoint, fund that type of growth was highly unlikely. Moreover, we all recognized that we were in a much more competitive environment, both globally and domestically. Our members were not only our best customers, but they were also our competitors. They were investors in the ECNs and competed against us. They considered more and more trading upstairs on their own from the standpoint of away from marketplaces generally. This was the time when the first dark pools began to become significant and develop. And it was clear that stock markets were going to be in a much more

competitive environment, have to invest more in technology, and have to be able to control their expenses. Frank had a clear vision that was going to occur, and that the only way that the NASDAQ was going to be able to compete in that environment was as a public company. And it's to his great credit that he positioned NASDAQ in that direction.

The ability to do an IPO never occurred because of the technology bust, but it did give Bob Greifeld, in the end, a currency that allowed him to buy two of the key ECNs, recombine the NASDAQ market, and also, move towards becoming a global market from a NASDAQ standpoint. And none of that would have happened if it wasn't for the effort of becoming a public company. So that, clearly, was something I feel very proud to have been part of. It was not an easy thing to talk the membership into. The membership liked the type of control that was involved in a member organization. But we knew if NASDAQ was really going to be able to make a role of itself, both competing domestically, successfully and operating as a global company, it was going to have to do it as a public company.

KD: So did NASDAQ figure that out before the New York Stock Exchange did?

RK: Well, the New York Stock Exchange talked about going public at the same time under Dick Grasso's realm. But the Exchange wasn't able to do it at that point. Grasso made a famous statement about they would be public before Thanksgiving, and it took a few more years and another CEO before that actually occurred. And I think that was the case because, as you started the 21st century, it was a period in which the floor still very much controlled the New York Stock Exchange, and was very much concerned about the type of changes that have since have occurred at the New York Stock Exchange. So there really wasn't an enthusiasm from the standpoint of the floor about becoming a public company. They, generally, liked the level of control they had about the decision making that occurred in the Exchange. While I wasn't here at that point, I think that was a large part of why the Exchange delayed becoming a public company. NASDAQ did lead the way from the standpoint about being a public company. You then saw a variety of the smaller marketplaces become public. And then you saw another trend occurring with Archipelago first becoming a public company, and then becoming an exchange, so that the automated trading systems that hadn't been acquired by NASDAQ chose to compete as public companies and as exchanges, and you've seen that continued trend exist as all the regional exchanges morphed and became, effectively, electronic or automated trading systems.

KD: So there was a great deal of change in the time you were at NASDAQ then.

RK: Huge change.

KD: But you're still on the cusp of really fulfilling the vision that you talked about, what Frank Zarb saw NASDAQ as being able to achieve.

KD: Absolutely. I look back, and great credit goes to Bob Greifeld who really moved NASDAQ after I left to meet that vision. But the efforts in first turning NASDAQ into a fully-electronic marketplace, and then secondly, moving it into a public company environment, were critical groundwork for where NASDAQ has gone and evolved in the years since then.

KD: But at this point, you'd hit your 13 years or whatever.

RK: At this point, I'd done my 13 years. I said, briefly, 9/11 had been a searing event for all of us in the securities industry. I felt very proudly being involved in the efforts to get NASDAQ back and running and able to operate with the New York Stock Exchange in opening the market that Friday after 9/11. But it really felt like a time again to consider doing a new career. Wick Simmons had left NASDAQ. Bob Greifeld had come in as the new CEO. I admired Bob a lot, but it really felt if I was going to leave, the coming of a new CEO, having worked with three separate CEOs at the NASD and NASDAQ, that this was the right time to leave. So I left and went to Citigroup, to find out a little bit of what it was like to be regulated. I'll summarize that briefly because it turned out to be a fairly short period.

Citigroup is a massively-complex organization with huge challenges at being able to operate as both a major global bank and a major broker dealer. It was a tremendous learning period in my life in that year because I became exposed to transactional work and in really looking and trying to understand how you keep together from a legal and compliance standpoint in an organization with a foot in so many countries, and an organization that was the subject of so many different mergers and, thus, had so many cultures built into it.

KD: You were in the international group, right?

RK: No. I was the general counsel of what was called the Global Corporate Investment Bank then, which was, essentially, the institutional broker dealer. And this was an interesting time because I was involved in putting together the response to many of Citigroup's problems with respect to two sets of scandals, for lack of a better word. One was the problems with respect to research analysts and investment bankers and the lack of separation and the lack of independence of research analysts. And the second was Citigroup's participation, along with many of the other investment banks, in the series of Enron transactions that gave a fraudulently misleading impression of Enron's financial position.

So it was a fascinating year. I learned a lot about how a broker dealer operates in a large holding company. We put in what I think were major improvements in the controls with respect to some of those businesses where Citi had failed its compliance obligations. Chuck Prince, both as CEO of GCIB and then elevating as CEO of Citigroup, deserves great credit for re-emphasizing the compliance culture and the importance of having an effective compliance culture in an organization like Citigroup, and it was very rewarding to be part of that.

KD: What did you bring from your work at the SEC and as a regulator at NASDAQ? What were the skills that you took to Citicorp that enabled you to do what you had been asked?

RK: I think I brought from there a good understanding of markets, a strong sensitivity to regulatory exposure, and an understanding of how to build compliance controls in a large organization. I think my background at the SEC and then at the NASD and NASDAQ helped me in being a part of Citi's efforts to sort of respond where they'd had failings in the past and building in a much stronger compliance environment. And that's probably what I felt best about my short time at Citi.

But then stuff happened at the New York Stock Exchange. The Exchange had its own challenges coming out of two basic problems breaking at the same time. One was the issues with respect to the board and Dick Grasso with respect to Dick's compensation and the concern that there had been not the level of Board oversight that there should have been with regard to a variety of the decisions with respect to Grasso's compensation. So a concern, overall, about the governance of the board and governance of the Exchange and the fact that the board, at that point, had a majority of industry representatives with middling levels of attention to overseeing how the New York Stock Exchange really worked. And the second set was a serious scandal with respect to how specialists handled customer orders, and concern about specialists regularly on a chronic basis trading in front of those customer orders. And with it, a concern that the New York Stock Exchange had not been alert enough to that activity and had not done an effective job in surveiling for them.

Those two things together led to a major upheaval at the New York Stock Exchange. Dick Grasso resigned. John Reed, formerly the CEO of Citigroup, was brought in as an interim CEO. John created a whole new governing structure in which the entire board of the New York Stock Exchange became public members, public with no affiliation either with any broker dealer member of the New York Stock Exchange or with any corporate issuer listed on the New York Stock Exchange. So every member of the Board, with the exception of John, had absolutely no affiliation with the New York Stock Exchange other than their board responsibilities, a profound change in the way exchanges—remembering that the New York Stock Exchange was not a public company at that point—

KD: Right.

RK: —still a not-for-profit membership organization. A profound change in the perception that the members controlled the exchange, as opposed to a public board controlling the exchange. The other thing that John did was to separate, because of the concerns that somehow business priorities had either colored decisions made by regulation, which I don't think was true, or had led to a neglect of regulation from a funding standpoint and an attention standpoint at the New York Stock Exchange. John created regulation as a separate operating entity of the exchange and created a new role of chief regulatory officer that would report directly to—at that point—a committee of the New York Stock Exchange board so that that chief regulatory officer wouldn't be part of senior

management of the CEO of the exchange, but would report directly to the board. At the same time, John found his successor, John Thain, somebody that I had served on the DTCC and NSCC boards with, had known and worked with some with respect to the recovery after 9/11, and had at different times interacted with at Goldman Sachs. I had a great deal of confidence in John and a good feeling about being able to interact with him.

The question of becoming Chief Regulatory Officer was first raised with me at a lunch with Cathy Kinney and Rich Bernard, Cathy being one of the co-presidents of the Exchange under John Reed at that point; Rich Bernard being the General Counsel, both of whom I had worked with for years going back to my days at the SEC. Subsequently I met with John Reed and he basically proposed that I leave Citigroup and become the Chief Regulatory Officer of the New York Stock Exchange. It was a hard decision for me because I felt good about the steps we'd made at Citigroup, and it was a time when I was really—my learning curve was higher than it had been in years and years from a legal standpoint. But it really felt like the right next step in my journey. I'd left the SEC and moved to the NASD with a foot in both camps; both the regulatory camp and the market camp. And then with NASDAQ spinning off, I'd made the decision at Frank Zarb's request to stay on the market side with one of my loves, but lost my other love from the standpoint of regulation. And this felt like the road not taken. That it was a chance, once again, to get back to my passion and concerns about self-regulation and regulatory oversight, in a time when self-regulation was really being called in question. This was not only the time of the New York Stock Exchange's problems with respect to specialists, it was shortly after the time in which Eliot Spitzer had been so active in the research analyst issues, and was in the process of leading the charge with respect to market timing and late trading. So it was a time in which people were basically questioning, rightly or wrongly, how effective is self-regulation? How had both the SEC and the self-regulatory organizations not been able to act more quickly, and whether fairly perceived or not, that it had been Spitzer that had really led the charge in these very significant failings from a control standpoint. Those are the very things that led me to go to Citigroup. But it led me as well, looking at the regulatory landscape, to feel like I could make a difference by coming back to the New York Stock Exchange and address my two passions. First, the exchange was, clearly, in the process with John Thain of rethinking its market structure. And at the same time, I would have a chance to recreate a new model of the self-regulatory organization from the standpoint that operated independently, but still was a part of a marketplace. I couldn't turn that down. It felt in some ways what I'd been training for for my whole career, and it felt like a chance where I could make a difference in both the regulatory structure and the market.

KD: Well, and this is a brand new position also.

RK: It's a brand new position. It was really a chance to re-think the regulatory role within the exchange. And the confidence of knowing that I'd have the support of the board and that I would report directly to the board, so there'd be no question about the fact of the board's willingness to prioritize regulation along with its ability to compete.

KD: Who were those board members that you worked with?

RK: Well, the board members who formed the Chief Regulatory Committee—remembering this is before the Exchange became a public company, so this was a committee of the board at that point—were three. And they were probably the ones most active with respect to their regulatory oversight, and I owe a great deal of gratitude to each of them. The chairman of that committee, who later became the chairman of the New York Stock Exchange after John Reed retired from that position, was Marsh Carter. Marsh had a long career at Chase Manhattan Bank on the risk management side and had then had a terrific stint leading State Street Bank very successfully as CEO. He had retired, moved on to become one of the public members that John Reed attracted to the board, and Marsh was the chair of the chief regulatory committee.

The other two members were Dennis Weatherstone, who sadly just recently passed away. Dennis was former chairman of JP Morgan. Again, with a long rich background with respect to the financial markets. The third member was Shirley Jackson who, after the Exchange became public and New York Stock Exchange Regulation had its own board, became the chairman of the board. Shirley Jackson was the former chairman of the Nuclear Regulatory Commission during the Clinton years, so she, while not a securities regulator, brought a strong feeling of what was involved in operating as an independent regulator, and Shirley was also the President of RPI. That group was a joy to work with in sort of this feeling of creating something new.

The self-regulatory organization of the New York Stock Exchange already had many strong people and a strong infrastructure, but I was able to bring in some terrific folks. I brought in Susan Merrill to lead the enforcement division, Grace Vogel from JP Morgan to lead member firm registration, moved Robert Marchman over from enforcement to head up market surveillance, and recruited John Malitzis from Citigroup to be responsible for all matters of floor surveillance. That team basically re-engineered the whole regulatory process at the New York Stock Exchange. We dramatically overhauled all of the floor surveillances. Moved to an enforcement program that, under Susan Merrill's leadership, developed a terrific reputation of being able to take on hard and complex cases and bring them to fruition. And we, I think, created a model, along with what had occurred in my earlier life with NASD Regulation, of an independent self-regulatory organization and established how that should operate as part of an exchange. I feel very good about how that evolved. Now a lot has happened in the four years since I arrived.

The first thing that happened was with the Exchange's purchase of Archipelago, the Exchange, in a single step, became a public company. That was, again, a magnificent effort of John Thain's leadership, and a dramatic change in the culture of the New York Stock Exchange in a very short period of time. It moved in steps. First, having a fully-public board, then from the standpoint of spinning itself off to public shareholders. The Exchange, in a very short period of time, became a far more entrepreneurial place, and a far more aggressive place. John, at the same time—I was pleased to work with him on this—changed the basic market structure of the New York Stock Exchange, creating a hybrid environment that would allow the Exchange to compete in the challenging time John saw ahead with the adoption by the SEC of Regulation NMS, and the need of the

Exchange to move to an environment where all executions coming from off the floor would be automated, and where instantaneous executions, rather than the delays built into a floor environment, would be the norm.

KD: Now is this happening at the same time that you're implementing this new self-regulatory agency?

RK: All at the same time. Yes.

KD: So aren't you chasing a moving target then?

RK: Absolutely. We were. This was a tremendous effort by Robert Marchman and John Malitzis. We had the challenges of changing the tires on a moving bus. We had surveillances that just weren't up to par that had to be rethought after the problems with specialist trading, and we were effectively changing the legacy to surveillance with respect to the market as it operated then, at the same time that we were working with the business side in building the hybrid market, a combination of a floor-based environment, but with fully-automated executions, within a market that was changing. You had to completely re-envision the threats: where the risks were, with respect to manipulative activity, etcetera, simultaneously. So I think that over that two-year period, we generated over 100 new surveillances, both to make better the surveillance of the existing market, and prepare ourselves for the hybrid markets. It was a really tremendous accomplishment that really modernized and created a truly modern surveillance environment.

KD: So it sounds like your regulation side is not only looking at the Exchange that exists in enforcing the practitioners at the time, but you're also working on a policy side to devise the new structure going ahead?

RK: Absolutely. We participated from this policy side, and we also made some significant changes at the urging of the board to put in a more sophisticated risk management structure that pushed us to start looking ahead, and asking not only what were the regulatory challenges today, but what would be the regulatory challenges in a hybrid market? What would be the regulatory challenges in an environment where there are far more dark pools in which trading is more fragmented? And how do you operate from that environment? How do you build surveillances that work for that? So it was, it was a tremendously exciting couple of years in which the Exchange was both changing its market structure—we were trying to both catch up and make sure we were doing a fully competent job in everything we did, and at the same time, try to re-think how market surveillance and regulation would operate. We also, at that point, had the responsibility for financial exam oversight of all the major firms, and we're thinking, re-thinking from a risk-based standpoint, how that exam program should operate. I was very, very lucky to bring in, Grace Vogel, an alumni from the New York Stock Exchange exam program from long ago with tremendous industry experience.

So, with respect to market surveillance and exams, we changed a great deal from the standpoint of building a regulatory system that more effectively looked at risk and looked ahead at the risks of a marketplace that was changing dramatically.

That took us to the next step, as I say. We became a public company in Archipelago, and then John Thain, in his continued restless efforts to position the Exchange for the competitive environment, really as a successor and inheritor of the vision that Frank Zarb had at NASDAQ at the end of the 90s. John engineered what was a tremendous coup in reaching agreement to merge with Euronext. It was the first European-U.S. merger that had occurred from an exchange standpoint, putting together most of the exchanges in the continent of Europe that had become, essentially, a confederation using the same technology as Euronext, and the New York Stock Exchange. And between those two mergers, Archipelago and Euronext, the Exchange morphed itself first into a global enterprise with much more effective technology, able to deal with the new competitive automated environment. Finally, it was an enterprise with a very substantial derivatives presence, both in the United States for the options markets, and in Euronext through Liffe -- one of the two largest futures markets in Europe. Overall, it was a tremendous effort from John to really increase the size and footprint of the Exchange.

KD: One would assume that that created some big challenges.

RK: It did indeed. We had to integrate the derivatives surveillance platform of Archipelago at that time, something that I think we did quite effectively. Then we had to work with our friends in Euronext over the subsequent year and a half to ensure, again for the first time, that there was more effective exchange of information across the board between our exchanges. We developed protocols to make sure that the Euronext exchange would be aware any time we were investigating behavior, and that we would be aware any time they were investigating behavior. And that really is the future. We're moving into an environment where there will be continuous global trading, and the ability of exchanges, both in Europe, United States and in Asia to be able to swiftly exchange investigatory information is a major, major challenge. One that we're really starting with now.

KD: What it means to regulate is very different in Europe, let alone other places. Did you run into any disconnect in that area where you really had to bring different cultures together?

RK: Great question. Yes. In a lot of ways. There was a great deal of concern in the basic consummation of the merger and getting the approvals we needed from all the European regulators, as well as the SEC. This was, of course, during the high point of concerns with respect to the impact of Sarbanes-Oxley and continued concerns from an executorial standpoint of the United States with respect to OFAC. There was a great deal of concern about contagion of U.S. regulation over in Europe. So we worked hard, along with the SEC, to ensure that the European regulators would have confidence that the regulation of the U.S. markets and the regulation of the European markets, while needing to be cooperative and connected, would not result in the SEC or U.S. regulators oversighting those European markets.

KD: So there was concern about that.

RK: There was substantial concern. Over time the European regulators became comfortable that nothing on the books at the present time would cause a merger to, say, result in an extraterritorial application of Sarbanes-Oxley, or changed the way OFAC worked with respect to the operation of those exchanges and concerns with regard to what the U.S. viewed as enemy or outlaw. It led to a device, an actual Dutch device, that had been used a couple times before, called a Stichting. The Stichting would require that, if there was a significant additional increase in U.S. extraterritorial jurisdiction that led to a material change in the regulatory oversight by the SEC over Euronext entities, power would, essentially, devolve from a decision-making standpoint from the board to a group of wise men, which is what a stichting is supposed to be. So they would be ready to act in a standby capacity to operate, and operate entirely in Europe. It was hoped the mechanism would result in decoupling the jurisdictional connection that was "leading" to this new exercise of extraterritoriality by the U.S. So huge paranoia about that, I think mostly unjustified, but took a great deal of effort by Chairman Cox, Commissioner Campos and Ethiopis Tafara to work closely with the European regulators to get them comfortable that this merger could happen without their losing their sovereignty and oversight capabilities of those markets.

KD: Has anything gone to the Stichting?

RK: No. The Stichting, hopefully, will sit there never to be used. Its purpose is really twofold. One is to make the United States Congress aware that there would be this mechanism, and give us incentives to urge the U.S. Congress to do nothing from an extraterritorial standpoint that might trigger the Stichting, which would basically make the governance of NYSE Euronext impossible. Secondly, if the Congress went ahead and did this anyway, it would create a governance environment so unacceptable for a public company that it would force NYSE to sell Euronext to avoid the implications of having governance occur outside by a group of people that weren't even elected by the shareholders.

So there's much to accomplish. On the regulation side, there's still much to accomplish. There's still -- because of EU confidentiality issues and the like -- significant difficulties in our ability to exchange information, even with our brethren in the Euronext exchanges, more so with the other European exchanges that we're not affiliated with. So there's a great deal of challenge still that, hopefully, NYSE Euronext will play a leadership role, working with the SEC, in trying to make sure that investigations can occur as efficiently as possible. Through IOSCO, the SEC has Memoranda of Understanding with each of these countries that allows the SEC to investigate securities fraud.

But those MOU's don't extend down to the self-regulatory organizations. And yet, as you know, the self-regulatory organizations do the groundwork with respect to most of the investigations for insider trading that are identified by our surveillances as well as many manipulation cases, even if we end up handing those cases off to the SEC because they involve entities other than broker dealers that we don't have jurisdiction over. So

the ability to make that system work and work efficiently is very important. You alluded to, correctly, the role of self-regulatory organizations in Europe is much less. Euronext has a market surveillance function similar to the market surveillance function we do in the United States. But all investigations are then handed off to the government. They're not done by the self-regulatory organizations.

And the self-regulatory organizations basically, except for minor violations of their own rules, don't bring disciplinary actions. Those are brought by the various governments. So you have a different role and a different challenge as far as everyone working together. That is going to be one of the great challenges of a multi-lateral environment, and a global exchange environment in the years to come.

KD: You also touched on one other thing in your discussion of what was new that's also pretty troublesome and complicated, and that's the derivatives.

RK: Yes.

KD: You got into not only derivatives, domestically, but also in Europe through Liffe. And there's a lot of new gray area there that, I guess, you're still figuring out how to regulate.

RK: Well, there are multiple challenges with derivatives, and multiple opportunities. On the one hand is the challenge, derivatives provide tremendous leverage and are very logical tools with respect to inter-market manipulations. So there are challenges in working cooperatively together to effectively identify those inter-market manipulation opportunities, particularly with the options market where options on individual securities are traded. We've worked hard to do that within our own organization, and beyond that is the Intermarket Surveillance Group where New York Stock Exchange Regulation has played a leadership role in trying to increase the coordination and automated capabilities on a consolidated basis of all the trading and derivatives and equities in the United States. That, of course, includes the efforts of CBOE and the other options exchanges as well as ourselves and NASD, which is now FINRA.

Then, of course, the other opportunity and the other issue gets strongly underlined with respect to the existing credit crisis. As it's been clear, there are secondary impacts of having the existing credit default swap and interest rate swap markets being generally non-transparent, operated as pure over-the-counter vehicles without efficient clearance and settlement, and without efficient market information that allows those products to be valued effectively. Of course, the valuation of those products, partially because of the liquidity problems, without getting deeply into the credit issues of the last year, have been a significant challenge for all of the regulators in both the SEC and the banking regulators over the last year in dealing with the various different mortgage-backed securities, their liquidity and what the proper value of those securities are.

So, yes, I think there's tremendous growth opportunities for derivatives, there's real interest as to how the over-the-counter markets evolve. I think Liffe will end up having a role in making those, at least, more efficient from a clearance and settlement standpoint,

and start to bring a little bit more into the regulatory penumbra of being able to look at how that activity interacts and relates to trading in the stock and exchange traded options and futures.

KD: Okay. Well, I want to head toward the end with the obvious, which is getting us to FINRA. And I'm interested in a phrase that I ran across called regulatory arbitrage. Essentially, the fact that people can figure out how to work these two different self-regulatory regimes. Can you give me a little bit about that and when you started to have an inkling that this might be in the offing?

RK: Well, there had been conversations about the two-headed monster of regulatory arbitrage on one side, and duplication on the other side for a period of years. As you're probably aware, the SIA had done a white paper in the late 90s that recommended creating a single member regulation unit to include both the New York Stock Exchange and NASD's member regulation operations. So it had been talked about off and on, but nothing had really occurred. The prior administration of the New York Stock Exchange had been adamantly opposed to any combination with respect to that. We then moved into the last three years. And I would say this is, again, one of the most difficult decisions of my life in working in this direction. Here we had just really taken huge strides to put together not only a market surveillance program, but a member regulation program that I thought had become state of the art.

I'd brought great people into the organization and the member regulation side. Grace Vogel. We had, I thought, a great esprit de corps and a great deal of pride in what we already accomplished and excitement in what New York Stock Exchange Regulation can do. Yet, on the other hand, you had increasing dissatisfaction in the industry in an environment where costs became more and more significant, over duplication of regulation. Despite the best efforts of Mary Shapiro and myself to more effectively coordinate both our interpretations, our rule-making activities, and our exam activities, and we did that for a period of two years, working as hard as we could to make that as efficient as possible, it was clear that you still had the problem of two sets of rule books, two sets of interpretations, even with efforts to try to bring them closer, and two exams that often would look on an inter-connected basis.

Fundamentally, when you're doing things where you're both—albeit we were the primary financial regulator, but when you moved into sales practice, concerns about conflict of interest, a variety of things that really couldn't be separated very easily, we were both looking at the same things. The problem with two entities looking at the same thing is, first, it can increase cost and burden on the industry. Second, you don't efficiently use your resources. You may be both looking at the same thing, you may be both missing something. Anybody who ever plays doubles in tennis knows the tremendous risk until you have a team that's fully integrated is assuming that your partner is going to step up and take the middle of the court as opposed to you and watching the ball go dribbling through the middle of the court as you both stand and watch it.

Well, there was a real risk that either we were getting in each other's way, or we would both be standing and watching when something happened, came through. And neither of us had the resources to be able to justify that. So we began having conversations. John Thain was a strong advocate of putting the programs together and probably made the initial significant speech at an SIA convention, indicating the willingness of the Exchange to be part of this effort. This was a time when Bob Glauber was retiring, and Mary Shapiro was appointed as the new CEO of NASD. Mary and I, obviously, go back years, as has popped up again and again with respect to this conversation in both parts, both in our SEC days and in my bringing her into the NASD to head up an independent regulatory aspect at that point. We worked together, we trusted each other, and so we began to have conversations of what would be involved in putting the two pieces of the member regulation program together.

The Exchange felt strongly that market surveillance was different because market surveillance was so tied to the operation of the market, and the knowledge of the market. But from the standpoint of the member rules, didn't make sense to have two rulebooks, didn't make sense to have two sets of interpretations, didn't make sense to have two exams. And as those conversations went on, oh, I guess really they had occurred informally before John's speech at November at the SIA conference. They began much more consistently after that, and went on for at least nine months, or longer than nine months, till we ended up announcing the merger that next fall, shortly before the next SIA conference.

KD: Did you talk about this speech with John Thain in advance and say, "You know, I think it's time to take this step. Go ahead and—"

RK: Well, John and I had talked about the fact that it was probably the right thing to do. John surprised me by deciding to go public on it at the speech, which was exciting as far as handling the concerns of morale of my crew at New York Stock Exchange Regulation. But we had talked before about the fact that while it was very difficult to lose the autonomy of a program that I was terribly proud of at that point, that it was the right thing to do. And it wasn't easy to do. I mean this had been my dream job. It had combined everything that I cared about, from being involved on a participating and advisory capacity as the exchange changed its market structure, to both the questions of how you ensure the integrity of the market, and also, particularly the problems that had led me to Citigroup, and then led me to New York Stock Exchange Regulation with respect to how to create a culture of compliance among the firms. The firms had made the commitment to build strong compliance teams, but the question was how did you get good about it? How did you start being able to anticipate the problems going forward.

And how does a regulator on the other side of the research analyst scandal, on the other side of Enron, how does a regulator get better at identifying the crises to come as opposed to just sweeping up the bodies in the crises before? I love that. I loved working in each of those areas. The thought of losing the exam program and much of my enforcement program from the member regulation side wasn't a fun thought. But it was the right thing to do. It was the right thing to find a way that it could work. And the only way it was

going to work effectively was for us to recognize that Mary would stay on as the CEO of the new organization. But that the New York Stock Exchange cared a great deal about how this integration worked, how our people were integrated in the overall integrity of that member regulation program. So I agreed to become the chairman of the board for three years for that, essentially, integration period, and to keep a foot in both camps.

KD: Why was Mary Shapiro the obvious choice for this?

RK: A couple of reasons. One, Mary had really led the NASD program and developed it over a period of 10 years. I think she was recognized internationally as a terrific regulator. She was younger than I was, so from that standpoint, she was in the position to commit to be there for a substantial period of time, which was important. John Thain wanted me to stay at the New York Stock Exchange. He was still concerned about the regulatory environment and the Exchange, both to ensure integrity and ensure that he had somebody he thought he could work with, and he wanted me to stay there from the standpoint of the market surveillance side. So for all those reasons, Mary was the right person. And the right position for me to re-invigorate my working relationship with Mary was as Chairman of the Board of FINRA.

And that's worked very well. It hasn't been an easy thing to integrate the two organizations, to put the cultures together. There are still challenges that are being completed from the technology standpoint, but it has been a joy to work with Mary again. FINRA has a great board, as we have a great board at New York Stock Exchange Regulation. It's been a tremendous joy to be part of the effort to put together a single rule book, which we'll accomplish in the next six months. I think what we've got is an organization that's stronger and more effective. Sometimes, you've got to step back in order to make that happen. I've been privileged to do a series of amazingly-interesting and rewarding jobs in my career. This was sort of my chance or my responsibility to step back to make sure that something that would be good for regulation would happen.

KD: You said that you had worked closely in trying to bring together as much harmony as you could in advance. And for whatever reason, it just wasn't the same as having a single organization. But you must have known a lot about what was happening in NASD and NASD must've known a lot about what was happening here. Once you brought it together, was there a point where you were just surprised to see the difference between how the two groups handled something?

RK: Well, on the whole, the groups integrated well. There wasn't a huge difference in the way the groups – they're different from a variety of circumstances. New York Stock Exchange Regulation is very consolidated. All of our people work out of New York. The NASD is spread over districts across the United States in a way very similar to the SEC with its regional offices. So it was a learning experience to realize the challenge of taking—the New York Stock Exchange was very proud and focused on its financial program, but it was focused on large firms. The NASD was the residual regulator of all broker dealers, had to worry about small firms and specialty boutique firms that did a variety of enterprises.

It was a learning experience to realize the challenge of putting together those two organizations, putting together a centralized organization from a spread out and diversified organization, putting out something that would work for both the large firms and the wide range of small firms that the NASD had. But it's worked well. And it worked well partially because New York Reg leadership all kept leadership positions in the new organization. Susan Merrill became the leader of the Integrated Enforcement Division. Grace Vogel became responsible for all financial regulation out of FINRA, while NASD people stayed responsible for the sales practice side, albeit with one of our key people, Mike Rufino, operating as a deputy in that area.

It's been a learning experience as to the challenge of putting together two rule books. We had done a lot of groundwork from that standpoint, but it's still very hard to put it together at the same time in trying to figure out not only which rule provision to do, but to try to make the rules themselves modernized and more effective than they were even before. So there were management challenges, and there were just challenges in producing all the things we need to produce. But it's gone well. Great credit to Mary Shapiro's leadership in that. But I think we're well on our way to having a program that feels like a single coherent program.

KD: Having a rule book will help.

RK: Having a rule book is the key next step. That's the challenge to complete in 2009. When we get to that point, I think we really will have created an example for the rest of the world, and created a regulatory oversight environment that works better in the United States. And also, hopefully, solidifies the role of self-regulation as we move into a basic questioning of exactly how financial regulation is going to operate in the United States. On the other side of the Paulson report, on the other side of the credit crisis, it's never been more important that self-regulation is efficient, coherent, and effective. I'd say that if anything, the decision to put the two programs together and become FINRA is prescient as you look at the challenges of regulation as you go forward. Certainly something I feel very good about.

KD: So what's in the future for NYSE Regulation?

RK: Well, our market continues to change. The future for NYSE Regulation is to continue to get better from a market surveillance standpoint. It is to integrate the American Stock Exchange, our latest acquisition. And with that, get back into the business of, both from a listing compliance and market surveillance standpoint, looking at the different risks of smaller companies, both with respect to financial fraud and manipulation. It is to more effectively integrate internationally, not only with our brothers and sisters over in Euronext, but more generally to make sure that international detection through market surveillance and enforcement is done as efficiently as possible. And with the self-regulatory organizations being effective from our role. It is to bring together again, and start looking more and more at the consolidated picture of a fragmented world, and a

fragmented market in the United States where there are more and more trading entities, more and more importance, as you know it, with respect to derivatives trading.

Over time, there will be more and more importance with respect to what's going on internationally. So that's the big challenge. I think we now have a program we're very proud about at the New York Stock Exchange. The next challenge is how do you look at the world as a whole, and how do you bring together that fragmented world and market world of market surveillance that has occurred as a result of the SEC's efforts to encourage competition.

We recently took the first step toward that, jointly, with FINRA, when we announced an agreement with all the other exchanges that New York Stock Exchange Regulation and FINRA would take responsibility for all insider trading surveillance programs. So rather than having 10 separate and discrete programs, again, we will have the responsibility for all New York listed securities and, over time, all AMEX-listed securities, and FINRA will have that responsibility for NASDAQ securities. So again, we're trying to pull together the full picture of what's going on in the trading markets in a world that's become more fragmented.

I think if you want to look at the challenges, that's what's going to go from here. It's going to be the effort first in the U.S., and almost simultaneously globally to make sure that the regulators see the full picture, and that insider trading and manipulation doesn't sneak under the radar scope because of the fact that our markets have become fragmented. So that's what's next. Next is to continue to get better, next is to continue to fine tune those surveillances, to continue to be aware of trends in the market, and mostly move to pull together surveillance again so that we're looking at a whole full picture, doing that as well as we can.

KD: Great. Is there anything that we haven't talked about that springs to mind?

RK: I think we've covered a lot. There were steps that occurred in the governance of New York Stock Exchange Regulation as a result of these mergers. As a result of the NYSE-Euronext merger, we moved from a chief regulatory committee of the board to a separate, discrete independent subsidiary and so New York Stock Exchange Regulation now has its own board, chaired by Shirley Jackson, of public directors that has oversight responsibility of both the NYSE and NYSE Arca, and shortly, the American Stock Exchange.

So that's probably the last step. The governance has now gone full circle. New York Stock Exchange Regulation continues to be a part of the New York Stock Exchange, but a fully-independent part. The goal of having an environment where we remain sophisticated in the way the market operates, and that we work effectively with respect to the implementation of new market structure changes to make sure the technology both protects against bad actions and works well with the necessary surveillance. But at the same time, that our decision-making is absolutely and affirmatively independent of any interest of the business. That's come final full circle with the evolution of the

fully-discrete corporate board of New York Stock Exchange Regulation. There are many, many things going on, but I think that captures what has really been an exciting journey, and captures, I think, what New York Stock Exchange Regulation and FINRA are today.

KD: So it seems like where the whole idea of self-regulation was in doubt just 10 years ago or less—

RK: Yes. I think we now have a platform to stand on. We have firm ground to stand on. We have an environment that addresses the legitimate concerns of conflict of interest, addresses the concerns of regulatory arbitrage and duplication, and at the same time, still gives the SEC the benefit from a regulator that's close to the ground and interacts regularly with the industry, is aggressively and determinedly independent, but at the same time, well financed and able to provide the government and the SEC with the leverage it needs to deal with the exploding complexity that is the securities markets.