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## Global Finance and Markets: What Is Next

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# Global Finance and Markets: What Is Next

Steven M.H. Wallman

## **Abstract**

Speech given at Session 1: The Global Capital Market: What's Next. Mr. Wallman spoke about the issue of globalization and how it raises a series of questions as to the direction of our markets over the long term. In addition, he noted that we tend to separate securities issues from banking or other financial services issues too frequently. He also elaborated on the points made earlier about the convergence—both geographic and product-wise—of financial services.

## GLOBAL FINANCE AND MARKETS: WHAT IS NEXT

*Steven M.H. Wallman\**

Thank you. Let me start by saying that — at least this week — I agree very much with what Dick Grasso had to say.

I'd also like to add that those who think that I am pressing strongly for our markets to move towards decimals merely because I think it will clearly be in the best interests of investors are absolutely correct. I think it is also true, though, that the move will be in the best interests of the exchanges in the long run, and that it will help our markets compete in a financial services sector that is increasingly globalized.

The issue of globalization raises a series of questions as to the direction of our markets over the long term. In addition, we tend to separate securities issues from banking or other financial services issues too frequently. The points made earlier about the convergence — both geographic and product-wise — of financial services are worth remarking as part of this discussion, and I will return to those shortly. First, however, I would like to reference briefly some related matters.

I would like for us to consider the basic question of why our markets are structured the way they are. We tend to assume this market structure exists because that is the way it has to be and has always been. It is useful, though, to consider and investigate how our markets and standards have developed and how technological innovation has been critical to that development.

Initially, one can ask why “exchanges” exist. There are at least two principal, generic reasons. One is to provide an efficient means for participants engaging in commerce to trade various interests or property — in other words, a mechanism for those participating in secondary market transactions to do so efficiently. A second is to promote primary markets more generally; a strong market for secondary trading facilitates the primary market by providing an efficient mechanism for those who provide capital (or other goods and services) to recover their investments in an enterprise so they can reinvest again in another en-

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\* Commissioner, United States Securities and Exchange Commission.

terprise. When these concepts are applied in the context of modern day capital — shares of stock or interests in bonds, or commodities futures, for example — other elements are added to make “exchanges” even more efficient. These elements include appropriate accounting and public disclosure, enforcement and liability standards, and trading systems and rules to facilitate transparency and price discovery.

In more ancient times, technological limits of communication prevented those who wished to exchange goods and services over long distances from receiving either appropriate price discovery or from engaging in efficient transfers of property between traders. The communications technology of the time did not permit much other than either efficient, but relatively localized or regimented commerce, or inefficient long-distance commerce.

As an example, one can focus on the need for accounting standards if there is to be an efficient “exchange” for capital. Hundreds of years ago, businesses were generally small and required little outside capital. Accounting standards were not particularly relevant, because they were not needed. A farmer with a surplus at the end of the year pretty much knew it; and a farmer running a deficit pretty much felt it in his stomach. Subsistence farming is the kind of activity where one does not need a very complex accounting system.

But consider larger businesses with outside investors: In order to make an investment decision, investors will need information. Some investors could travel to the business and investigate and review what is being done. But that would be very costly and inefficient if there were a large group of independent investors. Investigating all the raw data to evaluate a company’s business would be, as a practical matter, impossible for most investors unless an investor had a very large investment in the company and was willing to absorb the cost of investigation on an individual basis. Clearly, reviewing the data and preparing a single report — the cost of which could be shared by all those seeking to investigate — is far more cost-effective. Moreover, the ability to compare investment options among a variety of potential investments would be necessary for any capital supplier who wished to allocate its capital to the highest expected returns.

Consequently, if a system of capitalism is to include outside

investors, there is a clear need for a standard system of accounting and the ability to deliver information from those who are creating goods and services, managing businesses and seeking capital to those who are supplying capital. The system of reporting and presentation must have a reasonably high level of aggregation so that it can be understood, a reasonably high level of comparability so that it can be used to allocate capital across enterprises, and standards that can be enforced so that the system is useful. In essence, it must be something that looks like our current accounting system mixed with the legal underpinnings of warranties and anti-fraud rules.

Moving forward in time, we can imagine where technology might take us in as little as ten years from now. To place this exercise in perspective, just a few years ago, when I first started talking about the Internet, many did not believe it was terribly relevant. One leader of a very large software company said at the time something like: "The Internet is a nice idea, but it's not ever going to develop into something commercially viable." That leader has since radically changed his view.

And radical change continues to occur. Moore's Law is a famous prediction made a couple of decades ago by a founder of Intel that computing power will double every two years. In fact, Moore underestimated the role of progress; computing power over the last twenty years or so has been doubling every eighteen months. And now it's actually starting to double far more quickly than that. At the same time, bandwidth is increasing dramatically. The potential overall is quite remarkable.

Taking Moore's Law — which, as I mentioned, is now overly conservative — a computer program or operation that takes thirty minutes to complete today will be completed in half a minute ten years from now. And ten years after that, the same operation — the one that takes thirty minutes today — will take only half a second. It is not difficult to imagine then a very different future from what we have today.

## I. *TECHNOLOGICAL INNOVATION AND ACCOUNTING STANDARDS*

Let me provide an example of how technological advances in accounting and communications will drive a number of inter-

national issues, including the currently controversial one of cross-border transactions.

If processing power and bandwidth continue to improve at the pace just mentioned, it will be possible in the not too distant future to permit investors to obtain access to a database containing selected portions of a company's management information system through the Internet or a successor. This access would be joined with analytical programs that permit the investor to query that database. With such information, the program would create financial statements for each investor. And, with a few commands, an investor could create a different set of financial statements customized to meet that investor's needs. The investor, for example, could utilize rules based on U.S. GAAP, French GAAP, Japanese GAAP, and so on, or create proprietary rules that highlight certain performance or other aspects of the company's business or operations. Private sector innovators would compete to craft sets of rules embedded in programs that would be viewed as most useful for particular applications.

Over time then, the notions of U.S. GAAP or French GAAP, etc. will become less relevant — eventually becoming irrelevant. Instead of relying on accountants, standard setters and regulators to construct substantive rules, investors will rely on them to certify the integrity of databases and specify the minimum amount of information, timeliness of information and liability for misinformation, contained in the databases. With the de-emphasis of GAAP as a substantive construct, much of the consternation and controversy over cross-border transactions will dissipate. The same result of an internationalized offering process may also be obtained in a different manner through International Accounting Standards ("IAS"), it is easy to see how the traditional debate of U.S. GAAP versus IAS could be overtaken by investors' ability to create customized statements quickly and easily. Instead, future issues for regulators to be concerned with will include such topics as the level of integrity of the databases, access to detailed database information, liability, etc.

And there should be little doubt that these anticipated developments will become realities. I note that individuals steeped in technology do not find the ideas I am presenting even "interesting" from a technology standpoint. When I discussed this issue recently at a computing center, experts told me that they have the capability to develop this type of program today. And

already major corporations have precursors to such systems operating around the globe in connection with just in time inventory programs. These programs allow suppliers and major customers to access each others' databases automatically, allowing for efficient production and supply. Allowing suppliers of capital similar access is not far behind.

In addition to permitting easy comparisons between issuers, the ability to work directly with a company's raw financial data would be an extremely powerful tool. One of the major issues in comparing some accounting systems today is the issue of reserves. But if access is provided to the underlying data, a specific inquiry — such as "What makes up a company's reserves?" — could be easily determined, provided the component parts of that information are maintained in the database and the company permits it to be accessed. Again, none of this represents a technological problem. There are databases generally in use in a wide variety of industries that are far more complex than the management information systems at issue here.

This concept is not foreign to — in fact it builds on — the basic tasks that accountants currently perform. Accountants review and compile data from information systems and then compile financial statements in accordance with a specified set of rules. With access to the data in a properly designed database and some increase in computing power, a typical user could recreate the compilation activities of accountants. On both the accounting side and the technological side then, this process would not be difficult. I have explored these issues in greater depth in a separate article that those interested in the topic may wish to review.<sup>1</sup>

## II. *REGULATION OF ALTERNATIVE TRADING SYSTEMS*

Let me turn to another topic that is increasingly raising controversy in the international arena and that will be strongly effected from a regulatory and business standpoint by technological changes. The Commission has recently begun to consider how best to address the regulation of alternative trading systems, including trading systems in foreign countries. Recently, the

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1. Steven M.H. Wallman, Commentary, *The Future of Accounting and Financial Reporting, Part IV: Access Accounting*, 11 *ACCT. HORIZONS* 103 (June 1997).

Commission issued a Concept Release<sup>2</sup> seeking public comment on the subject. Underlying most of the issues in the Concept Release is a recognition that technology affects greatly the ability of market participants to trade. There is also the beginning of recognition in the Concept Release that technology will affect even what it means to "trade."

In the securities markets today, certain entities regulated as broker-dealers are engaging in activities that many believe more closely resemble the activities of exchanges. Other entities, including traditional brokerages, operate internal trading or crossing systems that incorporate elements of traditional exchange functions. Still other systems incorporate extremely sophisticated algorithms that permit users to set multiple parameters in connection with each trade — offering utilities far beyond what any traditional exchange currently offers.

Other types of alternative trading systems are also being used or developed. These alternatives range from simple single issuer bulletin-boards that allow only for expressions of interest only to be posted by individual investors, to systems that allows institutions to cross trades at prices between the spread. Some of these systems set their prices derivatively off regulated exchanges, obtaining a free-rider benefit from the price discovery process on these exchanges.

With the rapid development of so many alternative trading systems, substantial questions have been raised about how they should be regulated. The New York Stock Exchange, the American Stock Exchange, the NASDAQ and the regional stock exchanges not only are regulated exchanges or associations, but they also provide other benefits for investors from a regulatory perspective, including monitoring, surveillance and ensuring the integrity of the market. Most of the alternative trading systems do not provide any of those benefits and do not have the infrastructure — and do not incur the costs associated with such an infrastructure — necessary to provide them. Regulators must consider fundamental fairness and investor protection issues if they permit alternative trading systems to compete with traditional exchanges. However, it would clearly be a grave mistake to preclude these new competitors from offering the cost-efficient services that they currently provide to the public.

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2. Exchange Act Release No. 38972 (May 23, 1997).



Even more of a challenge for the future, and an increasingly recurring theme in connection with international electronic commerce, is the likelihood that technology will permit the creation of trading systems that do not have any particular identifiable entity running them. For example, there could be an Internet based system where the participants would note their desire to engage in a trade via an "intelligent" or "smart" agent called a "Net Bot." A Net Bot could scour the Internet using technology similar to that underlying a search engine. One agent could locate another that is designed to enter into the counter-side of the trade. After it locates the counterparty, it could engage in the trade and inform its "principal" that the trade has been completed.

Obviously, the Net Bot, by itself, isn't an exchange. And certainly an attempt to regulate the Internet as a securities exchange is not useful. One can see, however, the regulatory problem as technology becomes more sophisticated, particularly as we continue to attempt to employ regulatory tools created over half a century ago with little updating since.

It would be interesting to consider the problems presented by these new technologies as hypothetical or theoretical issues. But, they currently exist. Today, there are those who are employing smart agents or Net Bots for trading activities. While they are not trading securities, they are trading other kinds of goods and services. Eventually, regulatory hurdles will either stop progress, or the hurdles will have to be eliminated. I note that stopping progress is not a long-term solution.

And if regulators do try to preclude these advancements, the interesting questions are going to be: What does one preclude? Who does one stop? Are there to be regulations that preclude individuals from having software that engages in this type of activity, or that tries to outlaw the sale of such software, unless the manufacturer is a registered broker-dealer or exchange? Should there be prohibitions from operating over the Internet if the result is to allow a trade to occur? Should there be regulations that preclude settlement of a trade or transfer of record ownership of a security by any regulated entity (such as a transfer agent, or perhaps any public company registered in the U.S.) unless the trade is made through a regulated broker-dealer? To what degree do regulators go to ensure they can continue to regulate? And why? At some point we will need to consider better

the benefits and costs of regulation, and face the issue of whether regulation as it has traditionally been imposed is truly optimal for the future.

### III. REGULATION OF CROSS-BORDER TRADING

The issues raised in connection with alternative trading systems are further highlighted and made more difficult when a cross-border component is introduced. With sovereign control over market participants, the issues I just raised present the question of how to regulate — or not regulate — transactions such as those performed by smart agents or alternative trading systems. At worse for a regulator — assuming it thought it was the correct thing to do and Congress agreed — rules could simply “prohibit any U.S. person” from doing certain things. However, when the participants are outside of the sovereign’s borders, there is the complicating factor of attempting to impose whatever regulatory regime is deemed appropriate on such participants. What does a regulator do, for example, when a participant in another country is using the Internet as a mechanism for providing information from, or access to, their own (assume legal and non-fraudulent) services to persons anywhere in the world (including in the U.S.)?

The Concept Release, effectively and appropriately, raises issues regarding traditional alternative trading systems *in* the United States and how they might best be regulated. It introduces, thoughtfully, the issue of what should be a proper regulatory structure for those emerging technologies that reach just beyond existing alternative trading systems. (However, the Concept Release does not explore next generations issues raised by Net Bots, for example.)

By contrast, the Concept Release does not address as well current issues relating to foreign exchanges and similar potential Internet users outside of our jurisdiction. Simply put, regulators are comfortable about the effectiveness of the oversight of the New York Stock Exchange. The Commission knows where to find the Exchange, and knows that it is not going to go far. With regard to foreign stock exchanges, however, domestic regulators whose right to regulate stems from geographic sovereign rights are in a much more uncomfortable position.

Consider what is currently on the Internet: an exchange in a

foreign country that posts its bids and asks on the Web. On the same Web page, a broker in that country has a listing stating that he is willing to accept U.S. dollars in payment for securities traded on that foreign exchange. For the country in which this exchange operates, English is not the native language but everything on its Web page is in English and prices are posted in U.S. dollars (thankfully, using decimals). Clearly, one can wonder whether this posting and Web page access is for the benefit of residents of the foreign country or whether it is directed at residents of the United States.

This is where, because of the conceptual difficulty involved, the Commission has truly struggled. Assuming the posting is directed at residents here, the Concept Release assumes there will be information “access points” coming into the United States through which this information would be provided to U.S. persons, and it assumes that these information access points will be provided by regulated brokerage firms or through a securities information processor. It says nothing about the existence of the Internet. In sum, this part of the Concept Release is still worth reading because it is interesting, but substantially more thought is required in this area. Attempting to regulate access through the Internet is, in my opinion, neither viable nor wise.

#### IV. *FINANCIAL REGULATION REFORM*

Given the problems potentially facing the regulatory apparatus from technology driven changes to marketplace, the task is to think about what the answers might be to some of these problems. To do so, it might be helpful to refocus the inquiry and ask why regulators are trying to regulate in the first place. To switch to a topic addressed before, some presenters noted earlier the increasing convergence of financial services. An entity-based system, founded on the type of entity being regulated, relies on assumptions that are increasingly unrealistic — such as an assumption that banks sell nothing but banking products. The traditional alternative to entity regulation, “functional” regulation, regulates on the basis of the type of products being sold. Accordingly, it relies on centuries old terms such as “securities,” “insurance” or “bank products” and establishes separate regulators of each product. While the functional approach can cope with the reality that banks do, in fact, sell securities and futures,

this system of regulation cannot deal effectively with new products that defy ready classification. Derivatives, for example, are bridging the gap between insurance, securities, banking, and futures. To continue to regulate based on the assumption that financial service businesses and products will remain relatively separate and distinct from each other is not realistic. No longer can there be an expectation that there will be a comprehensive and efficient regulatory scheme for the next century emerging from either entity regulation or functional regulation. Thus, the solution to regulating our evolving financial marketplace will require looking to the reasons why we regulate and switching to a structure that regulates according to regulatory "goals."

There are four obvious goals of financial regulation. First, investor protection. This involves ensuring full and fair disclosure to investors about financial products, setting appropriate standards for sales practices and maintaining and enforcing anti-fraud rules. Second, protection against systemic risk. This is the risk that the failure of one large financial institution could lead to a failure of a material segment of the financial system. Third, protection against loss, stemming from individual firm failure, either to insurance funds or financial customers (separate from any systemic risk concerns). Finally, ensuring the integrity and efficiency of our trading markets.

Currently, responsibility for parts of these regulatory goals are distributed among many regulators. For example, the Securities and Exchange Commission regulates "securities," while insurance products, many of which pose similar regulatory issues to securities and bank products, are regulated by the fifty different state regulators. At the same time, commodities and futures, which also have many similarities to securities from the standpoint of investor protection, are regulated by the Commodity Futures Trading Commission. And, of course, banking products are regulated by the numerous bank regulators. Each of these agencies prescribes different rules for disclosure and sales practices for the different products. Consequently, financial services consumers receive vastly different levels and kinds of protection, depending on how a product is legally defined, even though, from a financial service consumer's standpoint, the products appear to be increasingly similar. Moreover, these legal distinctions, which result in very different protections, are not the types of

distinctions that most consumers are likely to be able to draw — especially as new hybrid products appear on the market.

To take another example, systemic risk concerns have traditionally been associated with banks. But a risk to the entire financial services sector might arise (assuming systemic risk is viewed as a valid concern) whenever any huge financial institution fails to satisfy its obligations whether it is a bank, a securities firm or a large insurance company. But all of these entities, which pose the same type of systemic risk, are regulated by different regulators applying different rules and standards.

In addition, different markets have different regulators, even though they are very much interlinked. For example, the Securities and Exchange Commission regulates in a comprehensive manner the New York Stock Exchange and the other cash equity markets. But the Commission has no direct regulatory authority over the futures markets, even though futures markets clearly have a significant impact on the cash markets and vice-versa.

One possibility is to have a super-regulator that regulates all financial services and products. I do not think, however, that it is necessary to have a single regulator for all elements of financial services. I believe we could, for example, fit comfortably within the U.S. model of multiple regulators with a framework that allocates oversight responsibility according to defined regulatory objectives or goals. For example, there could be a regulator, like the Commodity Futures Trading Commission,<sup>3</sup> whose purpose would be to promote the fairness and efficiency of markets. A different regulator could guard against consumer fraud in connection with the sale of any financial services products. The SEC has unequalled expertise in this area. Further, a regulator such as the Fed could focus on systemic risk. Paul Volcker stated he believes there is a real advantage in granting to a central bank some control over the very largest financial services firms because of systemic risk concerns. If he is correct, then this central regulator ought to care as much about systemic risk due to a potential default emanating from a State Farm Insurance Company or a Goldman, Sachs as from a Citibank or a J.P.

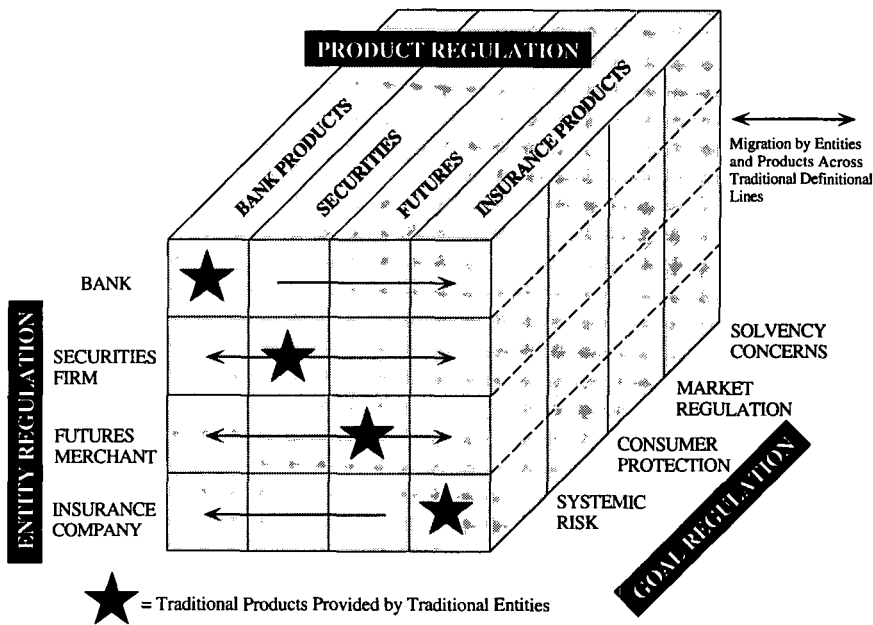
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3. Commodity Futures Trading Commission Act, 88 Stat. 1389 (1974) (codified at 7 U.S.C. §§ 1-26 (1997)) (creating independent federal agency devised to supervise futures trading).

Morgan. Finally, a regulator such as the Comptroller of the Currency or the Federal Deposit Insurance Corporation could focus on default risk of individual firms to insurance or customer funds. And, obviously, some of these functions, like the first two or the last two, could be combined.

This type of regulatory system — which I call “goal-oriented” regulation — should be able to regulate efficiently well into the next century, even as financial service providers continue to move into new territories and as the distinctions between financial products themselves become increasingly blurred.

Figure 1.



Both the U.K. and Australia are moving to a system similar to the one I am suggesting. In the U.K. it is called “Twin Peaks” because they identify two regulatory goals — consumer protection and prudential regulation — instead of four. The four goal hybrid may be more acceptable here politically, and would fit

more comfortably with our current regulatory apparatus. Nevertheless, absent some factors I would not expect to see, a shift to this type of regulatory system is unlikely to occur in this country soon.

Nonetheless, at least some elements of a goal-oriented regulatory system will emerge as solutions to some of the issues I raised, particularly as technology continues to force the convergence among various types of financial products. The regulatory structure will inevitably move towards such a framework through a series of related steps, including international cooperative arrangements and inter-regulator agreements to address the cross-border issues.

There are calls for another type of regulatory reform: deregulation to a point where capital markets will rely exclusively on anti-fraud laws for investor protection. This call for a fraud standard is not without logic. In a world increasingly globalized, and in a world with increasing technological sophistication, it is becoming more difficult, as discussed, for any geographically-constrained regulator to impose non-fraud rules on participants outside of the country, and to impose regulations on parts of transactions where there is no particular entity controlling the whole transaction. A system premised on preventing fraud will garner international support more easily than one based on imposing specific command-and-control regulations across borders, and will be much easier to apply because the focus will be on those who have an intent to deceive.

Notwithstanding the merits of such arguments, I do not believe we will arrive at that system during the foreseeable future for a number of reasons. Such an approach would conflict with the interests of some organized industry participants who would be concerned about a more open competitive playing field, and with the views of regulators who would be concerned about loss of jurisdiction and authority. And, without more study, I am not sure we should wish for a system based purely on anti-fraud rules. History teaches us that when it comes to other people's money there will always be those who will seek to steal it. Reliance on more substantive regulation has allowed for extremely efficient markets to develop, and for investors to invest with low transaction costs. I, too, have questions as to whether the right balance is always struck between fostering innovation versus maintaining the status quo — but on balance there is no deny-

ing that the system has worked, and is working, quite well. And, I think that our regulations — beyond those seeking solely to prevent fraud — have played a key role in the overall success of our capital markets.

One way to view our regulatory scheme is to consider the Commission as the equivalent of a union for investors — the collective bargaining agent for those who cannot easily or efficiently bargain for themselves. The Commission speaks for investors as a group, articulating those requirements that would be imposed by investors if there were an efficient mechanism for them to speak collectively. For those investors then who cannot easily or efficiently bargain on their own, the Commission's registration and related disclosure requirements, along with the securities laws' liability provisions, and the substantive regulation of the markets, provide the "contract" between them and the other market participants.

This system facilitates capital formation overall, and works better than just a fraud standard with voluntary disclosures. After all, we have a market test of that principle. Issuers could seek capital privately in this country through a non-regulated system that relies principally on fraud, or could seek capital abroad through a variety of different systems. But our regulated primary and secondary markets continue to attract issuers and investors at an enviable rate. To date, at least, the system works well.

Were the system designed to provide redress only in offerings where investors could prove fraud based on whatever voluntary disclosure an issuer decided to provide, I believe we would reduce the interest of investors in investing. Over time, this would hurt, not help, the capital formation process in this country and hurt, not help, issuers who seek capital.

## V. CAPITAL MARKET AND REGULATORY CHANGES

Many of the capital market innovations and regulatory reforms previously mentioned will emerge gradually over a period of years. Let me conclude by mentioning some other significant changes that I believe we will see soon. In the capital formation process, it is clear that the Commission will continue to move more and more towards a company registration approach. The Commission has been making incremental changes in that direc-



tion for thirty years now, beginning with Milton Cohen's article.<sup>4</sup> Future movement will inexorably be towards company registration.

With regard to exchanges and market regulation, it is also clear that more and more alternative trading systems will emerge, with some being successful and others failing. In addition, traditional exchanges will experiment with new kinds of trading systems that complement the systems they currently have. The Pacific Stock Exchange is doing that now in collaboration with a third party system.

The movement towards innovation in the markets will accelerate. But, the next real sea change will occur as new types of competitors enter these markets. Software companies and communications companies will edge towards the financial services sector as each recognizes that much of the basic activities and operations of the financial world involve information processing and communication — areas where these industries' leaders potentially have competitive advantages.

Additionally, and relatedly, the regulatory focus will shift from whether General Motors should be permitted to buy a bank to whether Microsoft, Intuit, American On-Line should be permitted to do so. Clearly, the debate currently surrounding the issue of mixing commerce with banking and other financial services will have to be joined. I believe this mixing will be allowed and eventually will be seen as beneficial.

With regard to the federal deposit insurance system and the federal safety net, there should be, although I would not predict that there will be, a major debate as to whether the private sector can assume these roles. If these safety nets could be privatized, there would be an opportunity to rationalize better certain parts of the overall regulatory structure.

These are some of the things that I see debated over the next five to ten years — I would not want to suggest they would hold for the next fifteen or twenty. I do believe, however, that there will be no doubt that the technological forces I outlined will be the major influence in shaping our financial services world over that longer period.

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4. Milton H. Cohen, "Truth in Securities" Revisited, 79 HARV. L. REV. 1340 (1966).