

## Summary of Session 2 Panel Discussion

The presenters were Till Guldimann, Senior Vice President at Sungard Data Systems, and Jim Marks, Director at Credit Suisse First Boston. The session was moderated by Lawrence J. Radecki, Assistant Vice President at the Federal Reserve Bank of New York.

The session featured two presentations on how technology might affect the structure of financial services firms. Guldimann and Marks agreed that advances in information technology will result in more specialization by these firms at the same time that consumers obtain better access to product information across firms. Both panelists also emphasized that in the future, the successful providers of financial services will model themselves as Internet portals or hubs, where consumers will return to frequently when seeking financial services. Finally, they observed that advances in information technology should intensify competition in all markets.

## Till Guldimann

Till Guldimann organized his remarks into three parts. The first part covered the three major information technology drivers transforming financial services. The second reviewed how these drivers affect the mechanisms of distribution, markets, and competition. Finally, he spelled out the implications for integration in financial markets.

John Wenninger, an assistant vice president at the Federal Reserve Bank of New York, prepared this summary.

The first driver, Guldimann explained, is better (faster and less expensive) communications technology. The capacity for electronic transmission of information has been growing rapidly, and intense competition within this industry will drive the price toward zero. Consumers and businesses, Guldimann emphasized, will have virtually free access to information; the issue is what they will do with the information. He speculated that competitive advantage no longer comes from access to information, but from the ability to use it.

With this improvement in information technology comes the impetus for the second driver—that is, for financial services providers to move away from the vertical integration of products and focus more on dominating globally in narrow market niches. Guldimann noted that in financial services, for example, firms already are specializing as global custodians, underwriters, and derivatives houses.

Guldimann identified the third driver as the rapid growth in financial wealth. This wealth must be managed professionally. The professional managers will compete for business on the basis of new performance standards: total returns adjusted for risks. He saw three likely implications: 1) performance can only be improved by more frequent trading, 2) markets will be under pressure to become more efficient, and 3) consolidation into ever-larger asset managers will end because of liquidity constraints.

Turning to his second topic, structural change, Guldimann pointed out that global suppliers of specialized products need

The views summarized are those of the presenters and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.

a mechanism for distribution, and consumers need better ways to procure and assemble specialized products from multiple producers. The Internet provides the necessary global reach to accomplish these tasks. Internet portals emerged to create stronger ties to customers by giving them convenient access to a firm's own products as well as related products of other firms. Some portals will dominate markets by aggregating ever-larger amounts of information, he observed. Depending on a firm's perspective, however, portals can also create tension. On the one hand, it is desirable to be the only bank on a major portal. The bank and its customers can do business together more easily. On the other hand, if a bank is just one of many located on the portal, then competition occurs on the basis of price alone, because comparison shopping becomes relatively easy.

Offering another example, Guldimann explained that industrial customers do not want to go to a supplier-operated portal and pay the posted prices; rather, they would prefer to establish their own portals, where suppliers come and bid on their orders in a reverse-auction environment. In short, everyone wants to gain the "portal advantage" in business relationships, and Guldimann expected intense competition among portals. The goal is to control access to the customer and compete on the basis of value to the consumer rather than cost to the producer.

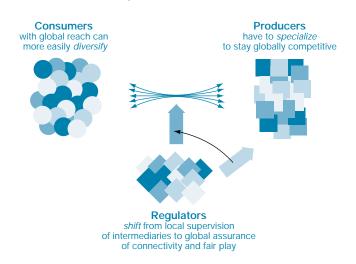
Markets are changing as well, he argued, becoming more efficient as old, expensive intermediaries are being replaced by direct access to most of the information these intermediaries once controlled. The most expensive component of a transaction—helping buyers and sellers find one another and establishing market prices—has fallen sharply in recent years as a result of improvements in information technology. Moreover, as the cost of connecting to the network has also declined considerably in recent years, Guldimann speculated that the highest cost component of a transaction now appears to be in-house processing: the next part of a transaction likely to undergo automation.

Finally, Guldimann expected that the nature of competition will also change because of technological advances. Products evolve into new ones more rapidly than consumers can adapt to the change, he noted. Hence, technology (software) firms will be able to retain their customers for fairly long periods of time, until a new competitor invents a "disruptive technology" that is considerably less expensive and basically transforms the marketplace.

Integration, Guldimann emphasized, is basically about total connectivity of wholesale product providers, retail customers, and intermediaries. Transaction networks are being developed in such a way as to enable any participant to initiate a fully electronic transaction—that is, without human intervention—from retail to wholesale, through the necessary intermediaries, and back to the retail customer. These steps, Guldimann reminded the audience, are often referred to as "straight-through processing." Such total connectivity will produce substantial cost savings, and the resulting integration will create enormous value. At the same time, customers will demand service that is available twenty-four hours a day, seven days a week. In this environment, the supporting systems will evolve from batch to continuous processing. To accomplish this task, specialized global processing companies will create value by linking all of these systems—not just in-house, but across the industry—so that total connectivity can be attained.

Guldimann closed by speculating on one of the conference's fundamental questions: whether specialization or diversification will prevail in finance. His conclusion was that users of financial products will have substantial opportunities to diversify across providers because they will have low-cost or free access to information about all product offerings (Exhibit 1). At the same time, Guldimann emphasized, ever more specialized producers of services and products will develop globally because competition will occur in narrow niches. Regulators and policymakers will have to shift their focus over time from the producers of financial services to the risks inherent in the global networks.

Exhibit 1
Diversification or Specialization?



Source: Till Guldimann, Sungard Data Systems.

## Jim Marks

Jim Marks organized his remarks on technology around five themes: an historical perspective, the current environment, the reaction of banks to technological innovation, the perils of specialization, and the future of financial services.

Marks began by addressing the basic question of whether firms will diversify or specialize in an Internet-enabled, post-regulatory world. The short answer, he said, was yes. Some firms will try to get into new product lines, but the lessons over the past twenty to thirty years have taught us that technological improvements lead to specialization, or perhaps a better term would be "disaggregation." However, even as firms specialize, Marks cautioned, they should look for opportunities to diversify somewhat because overspecialized firms can become extinct quickly if a sudden change occurs in the business environment.

Thirty years ago, Marks reflected, it made sense to have all the business processes involved in delivering a financial product located in the same physical space because it was difficult and slow to move documents from one location to another. For example, a mortgage application would be filled out at a bank branch, where credit analysts and others involved in the approval process would also be located. As technology improved, electronic communications became faster and data storage became automated. A portion of the processing business was moved out of expensive branch locations to data centers at remote sites, where the cost of real estate was less expensive.

Over time, Marks explained, the managers of these data centers learned that they could provide these specialized services at low cost not only for the branches of their respective banks, but for other banks as well. Expanded volumes resulted in economies of scale, as fixed costs were distributed across more customers. In addition, as the client base expanded, a positive feedback loop was created, as clients asked whether other operations could be outsourced to these data centers. Now, even the largest banks realize that it is less expensive to outsource to third parties than to develop new processing technology internally.

The end result, Marks stressed, has been an increase in disaggregation (specialization) resulting from improvements in technology over the past thirty years. That is, the separate value-added business processes that were contained within banks are now being performed by third-party specialists.

According to Marks, in the current environment, specialists dominate the businesses of credit card processing, electronic bill presentment, inexpensive on-line stock trading, and mortgages. The last two businesses have important

implications for the growth of bank and thrift balance sheets, he added.

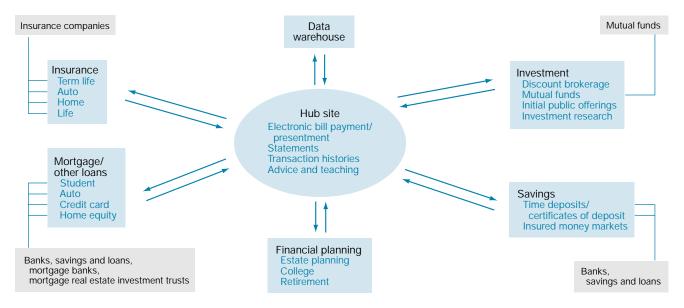
Marks pointed out that as a result of low-cost on-line trading, consumer holdings of stocks are growing several times faster than their deposits at banks and thrift institutions. Consumers increasingly do not need intermediaries to invest funds on their behalf. In the mortgage market, he explained, only the origination function tends to still remain in the traditional environment. The credit decision is outsourced to credit scoring specialists. The mortgage then undergoes an underwriting review by other specialists, who securitize it and sell it in the secondary market. This entire process, which had been contained within thrifts and banks in the past, is now being handled by these various specialists. And, Marks said, the mortgages themselves end up in the secondary market, rather than on the balance sheets of financial intermediaries. Hence, banks have lost both deposits and assets as a result of specialist activities—losses prompted and enabled by technology.

The reaction of banks—especially to the innovations among the technology specialists—is fear, Marks argued. And the response to this fear nearly always is to form banking technology consortia. These consortia, however, do not have a good success record. At high, conceptual levels, members of consortia can reach agreements, observed Marks, but when the time comes to identify specific aims and goals, disagreement occurs because of political and cultural differences.

Nevertheless, specialization is not without its dangers, according to Marks. Biological and evolutionary studies have clearly recognized the threat of overspecialization—that is, a sudden change in the environment can make the overspecialized suddenly extinct. This outcome suggests some need for diversification. Marks emphasized that banks should first identify their competencies and the products and services in which they should specialize. The next step is to focus their energy on leveraging those competencies. Leveraging is accomplished by identifying closely related products that banks can diversify into and that allow banks to adapt as the environment changes.

Going forward, Marks projected that financial services will evolve into a hub-and-spoke structure. The financial hub, at the center, will control the customer relationship (Exhibit 2). The critical element of a hub will be the transaction account, as it is today in the physical world. The digital version will likely be built around electronic bill presentment and payment or other core services that bring consumers to its location every four or five days. Beyond payments, the only other service that can accomplish this, Marks speculated, might be one that consolidates, into a single statement, balance information across all the financial institutions with whom a consumer might have relationships.

Exhibit 2
A Working Model for Tomorrow's Financial Services



Source: Jim Marks, Credit Suisse First Boston.

In either case, Marks pointed out, the operators of the hub will be able to gather a substantial amount of information about a consumer because of the large number of transactions passing through the hub. It will be very important to become established as a hub, he concluded, because the hub will have the best opportunity to make the sale of the next product that the consumer wants. That product could be one offered directly by the hub, or the hub might collect a fee for delivering the best of the breed from a third party.

## **Questions and Answers**

In light of his apparent endorsement of specialization, Marks was asked about the rationale behind a recent merger between a large bank and an insurance company. He said that he did not fully understand the attraction of the merger. It appeared to be based on the false premise that large databases will enable a financial institution to predict the next product that a consumer will buy. The institution will then attempt to cross-sell that product. Marks believed that it would be much simpler to have enough ongoing contact with the customer, so that the

customer already knows that the product is available if and when it would like to make a purchase. This approach underscores the importance of being a hub on the Internet.

Both panelists were asked to comment on the practice of cross-selling as a mechanism for obtaining continuous customer feedback and information, so that the best products—proprietary or third-party—could be directed to the customer. Specifically, how does a bank accomplish this if a hub is standing between it and its potential customers? Moreover, are any banks successfully adopting these models? Marks emphasized that for a bank to be successful in the future, it will have to be established as a hub for financial services. The bank can then control the customer experience. With respect to which banks are successfully adopting these models, he noted that there is a large gulf between what banks say and what they actually do.

Guldimann added that all the major financial services providers now realize the importance of the customer connection and are making large investments in this connection, hoping that the investments will help to retain customers. Nonetheless, he still expressed some doubt about whether customer retention can prevail in an environment in which customers have easy access to information across financial institutions.