

The Marketing of Bank Risk-Management Services

Donald G. Simonson
University of New Mexico

ABSTRACT

This article analyzes the need to reform the structure of bank risk-management services (RMS), including the sale of derivatives. It reviews the contribution derivatives make to corporate financial management and discusses threatened restrictions on bank RMS following large losses reported by corporate clients. The two major weaknesses in RMS are characterized by *incentive incompatibility* and *asymmetric information*. Steps are proposed for aligning bank RMS incentives with client objectives. This requires reskilling bank management of RMS consistent with the holistic demands of globalization on corporate operations and strategies. Additional steps are proposed for equalizing buyer-seller information on the risks of opaque derivatives. These steps involve assistance to clients in setting policies leading to position limits and loss tolerances and instituting monitoring and disclosure. © 1995 John Wiley & Sons, Inc.

The boom in bank marketing of risk-management services (RMS), including exotic financial derivative securities, to corporate finance clients entails two structural barriers to economic efficiency. First, the relationship between buyers and sellers in the bank derivatives marketing boom is characterized by *incentive incompatibility*. The boom is fueled by corporations' demands for comprehensive RMS. Their demands, in turn, are fueled by the globalization of commercial activity and financial markets that has led to wider involvement of the finance function in corporation affairs. Bank derivatives specialists would seem to be well positioned to help corporate clients deal with the

greater risks that attend globalization. However, the objectives of bank RMS specialists often do not coincide with those of corporate clients. Bank derivatives specialists typically are focused on financial markets and the production and sale of special-purpose derivatives. The evolving global corporation requires multidimensional finance professionals to give high priorities not just to financial markets but also to corporate operations and strategies. They are not motivated to address corporate risk holistically. Second, when banks sell exotic financial derivatives to corporate finance clients they typically know more about the derivatives' potential risks than the buyers. Banks' profits are largest on derivatives that require the most engineering and are the most opaque to the client. Banks may exploit such *asymmetric information* by understating the derivatives' risks. The greater the information asymmetry (opaqueness), the larger the profits.

The marketing of RMS, including financial derivative securities, may be the fastest growing and most remarkable global banking activity of recent years. The risk-management market is still in its infancy with its greatest expansion yet to come as banks and corporate end users gain technical skills and experience and as worldwide derivatives markets continue to expand. Most of the world's largest banks sell RMS, linking their corporate clients to the pricing efficiencies of the markets for derivative securities. In addition to being profitable to banks, risk management is attractive to client firms. Potentially it adds to the firms' values by helping them manage the rising global risks of commodity prices, currency exchange rates, and interest rates. RMS stabilize firms' costs of funds and raw materials and protect firms' profits in multicurrency cross-border operations.

In addition, corporate RMS, and the sale of derivative products in particular, adds value to the selling banks themselves. Trading activity, which prominently includes derivative sales, at U. S. money center institutions exceeded 30% of total income during 1993 (Lanchner, 1994). Bankers Trust New York Corporation reported that 71% of its earnings during the first quarter of 1994 came from sales of derivative products to clients (Celarier, 1994). Banks were attracted to the large profits in selling derivatives to corporations and expanded this business dramatically in the early 1990s.

However, bank corporate clients have sustained highly publicized losses on bank-sourced derivatives programs. These losses could threaten the future viability of the banks' risk-management businesses. The losses invite official scrutiny and the threat of restrictive regulation. In addition, they reveal real and potential conflicts between banks' profit objectives and the RMS needs of their corporate clients. Finally, such conflicts may damage banks' reputations and negatively affect their traditional credit and other business relationships with corporate clients.

This article argues for two fundamental changes to help banks protect their risk-management businesses and to shield their corporate relationships from mishaps in RMS. The changes are, first, to bring bank relationship management in line with corporate client objectives by reskilling bank risk-management specialists consistent with the holistic demands of globalization on corporate operations and strategies. The second change is to equalize buyer-seller information disclosure and monitoring systems through cooperative commitment to a system of client risk limits.

The article is organized in four key sections as follows: The first of these sections describes the principal types of financial derivatives and the scope and scale of derivatives markets, and reviews recent criticism of banks' relationships with their corporate derivatives clients. The second key section discusses the socioeconomic contributions made by corporate risk-management programs and explains how these programs use derivatives. The third section discusses the need for banks' relationships with corporate RMS clients to correspond to evolutionary developments in the modern corporate finance function. Finally, the fourth section describes current risk management marketing strategies as an extension of banks' deficient relationship management practices of the past. The article's two key recommendations are summarized in a final section.

THE DERIVATIVES SCENE

As sellers and promoters of derivatives, global banks have contributed the most to the extraordinary boom in world markets for financial (currency, interest rate, and equity) derivatives. Ten U. S. money center banks account for between one third and one half of the world total of derivatives. At the end of 1993, they reported derivatives holdings of nearly \$11 trillion, compared to the U. S. General Accounting Office's estimate of \$17.6 trillion notional value for the world of total of derivatives one year earlier (Siems, 1994; General Accounting Office, 1994; see R. Smith & Lipin for 1994 data). Recently, however, trading volume of derivatives has grown faster outside of the United States (Nusbaum & Reerink, 1994).

The values of most derivatives are *derived* from the values of underlying assets or indices of asset of values. Three principal types of derivatives are used in risk management: futures or forwards, options, and swaps. In addition, single mortgage or other fixed-income instruments whose future cash flows are separated and repackaged into several maturity tranches are usually considered to be derivative securities. They are not precisely derivative, however, because their values do not depend on underlying securities or indices. In this study, references to derivatives do not include such repackaged instruments because they are

not generally engineered by banks nor are they used to protect against market risk.

Derivatives' values and their cash-flow properties are intimately connected with assets traded in or indices of capital and currency markets. Futures and forward contracts give the holder a position in assets to be delivered at a future date. The future transaction price is fixed in advance at the time the contract is opened. Options contracts grant the right, but not the obligation, to buy or sell an asset at a preset transaction price either before or on the options' maturity date. Swaps are either contracts in which two parties agree to exchange cash obligations on a notional principal or else exchange obligations to make payments in two different currencies. Their pricing is based on interest rate or currency indices and not on underlying securities *per se*. Of the derivative types, corporations most commonly use interest rate swaps, followed by forward foreign exchange contracts (Group of Thirty, 1993).

These basic derivatives are plain vanilla variations designed to hedge risks. Generally, they are not acquired for speculative purposes or to leverage movements in the underlying asset prices. Other simple derivative variants include caps, floors, collars, and swaptions that take on the characteristics of one or more of forwards and futures, options and/or swaps.

More complex exotic derivatives are creatively engineered and often facilitate the leveraging of returns (or losses). Also, they may be designed to reduce the cost of options by more precisely limiting the protection they offer against risk. These have fanciful names such as leveraged swaps, differential swaps, compound options, digital options, average-rate (also Asian) options, corridor caps, knock-out options, knock-in options, ladder options, and others.

Valuation of the most exotic options requires highly complex applications of mathematics and computer programming, which render them opaque. Because of the extensive engineering value added, their creators price them considerably higher than plain vanilla instruments. Consequently, banks emphasize the marketing of exotic options because they produce far greater revenues than plain vanilla options. These circumstances may create conflict with banks' corporate customers. When they lose money on exotic instruments, these clients appear to be victims of banks' profit motives. Partly as a result, corporate and public officials question the safety and propriety of banks' sales of opaque commodity and financial derivatives to corporate clients.

Corporate treasurers and chief financial officers became wary of derivatives contracts following reports of large losses ranging from \$8.3 million to \$1.58 billion by major, presumably sophisticated, companies (Shuriff, 1994). In addition, it appeared that many other firms experienced losses but did not publicize them. *The Wall Street Journal* estimated that the value of announced losses exceeded \$6.4 billion at

nonfinancial and mutual fund companies in the 1½ year period beginning in early 1993 (R. Smith & Lipin, 1994). As more announcements of derivative losses by leading firms surfaced, corporate CEOs became alarmed. The CEOs feared that they may have overlooked the possibility that their own firms also might be holding positions in exotic derivatives (for cases, see Lipin, Bleaksley, & Donnelly Granito, 1994). The alarmed response of corporate managements shook market confidence in derivatives and in bank units that sell them to corporate clients.

In particular, observers widely criticized Bankers' Trust New York Corporation, when that bank became identified with corporate clients who had lost money on derivatives. They especially criticized the bank's involvement in Procter & Gamble's \$157 million loss of levered interest rate swaps. The bank was further linked to several prominent cases of derivatives losses. The basis for criticizing Bankers Trust, as well as several other money center banks with high volumes of derivatives sales to corporate end users, was these banks' aggressiveness in pursuing exotic derivative sales. They were charged with being too focused on the large profits in such sales and with not showing due concern for the exposure the sales created for their unsuspecting clients (Lipin, Donnelly Granito, & Scism, 1994). In addition to the premiums banks earned on such sales, the sales appeared to place the banks in direct conflict with their clients. Critics noted that the banks, as derivatives counterparties, were enriched in proportion to the losses suffered by their clients.

In effect, critics charged the banks with neglecting the interests of unknowing customers—unsophisticated corporate treasurers—by selling derivatives that were too complex for their customers to understand. This charge was tested by Gibson Greeting, Inc. in a suit against Bankers Trust following Gibson's \$23 million loss on a leveraged interest-rate swap position sold by the bank. The firm charged Bankers Trust for fraudulent misrepresentation and also held that it was an unknowing customer (a later suit by Procter & Gamble charged fraudulent misrepresentation but did not use the unknowing customer charge) (Lipin, 1994a). This position was contrary to existing law that treats both financial institutions and corporations as sophisticated parties that are not due the protection accorded to individuals. The case was settled out of court with Gibson agreeing to absorb only \$6 million of the \$21 million losses.

A counterargument to claims of corporate innocence holds that banks are not responsible when corporate clients' are not familiar with exotic derivatives. Corporate treasurers are financially sophisticated and should be especially cautious and fully cognizant of their limited understanding of exotic derivatives. The reality is that the treasurer's firm is not exposed until the treasurer actually approves transactions proposed by bank sellers of derivatives.

The events of 1994, including Gibson Greetings' suit against Bankers Trust, raise crucial issues of bank-client conflict in the marketing of risk-management services. Potentially, *moral hazard* exists when a relationship, such as the bank-client one, is characterized by *asymmetric information*. For example, banks have more complete information than their clients about the probable market performance of exotic derivatives they have engineered. Often, such instruments are notoriously opaque to the buyer. In such cases, the bank may be able to enhance its own returns while increasing clients' vulnerability to loss.

In addition, contracting arrangements between bank risk-management sales units and corporate clients are not *incentive compatible*. The clearest case of divergent incentives is the win-lose positions banks take vis à vis their clients. As counterparties or as holders of short positions against their clients' long positions (or vice versa), banks stand to gain from their clients' losses. Even when the bank has no active stake, as with the design of a hedge for a client, the bank's compensation is not tied to performance—for example, the success of the hedge. Equitable solutions to conflicts such as these require monitoring and auditing, objective performance reporting and incentivizing. These solutions are revisited in the conclusions section of this article.

RISK MANAGEMENT IN THE FINANCIAL SYSTEM

Corporations' highly publicized derivatives losses caused public officials to conclude that derivatives activities, and especially those considered speculative, presented unacceptable risks to the financial system. A General Accounting Office report in May 1994 recommended regulatory oversight of over-the-counter derivatives dealers and the derivatives activities of securities firms and insurance company affiliates (General Accounting Office, 1994). Oversight was defined to include capital standards and annual comprehensive examinations of derivatives dealers' risk-management systems.

Meanwhile, the House Banking Committee drafted legislation under the leadership of Representatives Gonzales and Leach that called on Federal regulators to "enhance the supervision and regulation of derivatives activities on financial institutions" (H. R. 4503, 103d Cong., 2d Sess., May 26, 1994).

The bill provided for strengthening capital requirements, requiring comprehensive risk management systems, conducting joint agency examinations and requiring prudent collateral and reserves (Mr. Leach had previously introduced a bill with similar provisions: H. R. 3748, 103d Cong., 2d Sess., January 26, 1994).

The public policy positions represented by the GAO study and the

House bill give short shrift to the role played by derivatives in risk-management programs. Specifically, they do not emphasize that derivatives facilitate the management and transference of macrofinancial risks. In addition, contrary to the impression left by these documents that speculation in derivative markets poses high risks for the financial system, the GAO report and the House bill failed to acknowledge the positive and probably necessary role of derivative markets speculation. In fact, by taking the counterside of hedger's positions, speculators may dampen financial market volatility and add necessary depth to derivatives contracts.

In general, derivatives permit users to disentangle and share risk, transferring certain risks to others and permitting users to retain the risks that they are competent to manage. In addition, users gain a major abstract benefit because, as players in derivatives, they enhance their understanding of innovative ways of measuring and managing risks. Finally, the notion that derivatives permit risks to be traded freely in the marketplace contributes path-breaking insight into the nature of risk management.

Beckett (1993) lists three concrete types of transactions that are facilitated with the use of derivatives: hedging and speculating, adjusting cash portfolios, and arbitraging price discrepancies in financial markets. Although each of these uses can be affected by transacting in the underlying assets themselves, derivatives greatly facilitate and reduce the cost of execution. Because they are intimately tied to the value of underlying assets or price indices they can be specifically engineered to mirror, and therefore offset the risks in, firms' cash positions. Derivatives transactions are executed quickly without a ponderous securities registration process and with little or no documentation on the front end. Also, unlike the cash markets, users can take short positions as readily as long positions.

For corporate end users with regular and significant financing requirements, derivatives make liability management a much more active and, potentially, value-adding undertaking.¹ For example, (Goodman, 1989) notes the contribution interest-rate swaps make to liability management. She cites the ability of swaps to (a) manage the matching of balance sheet cash flows by altering the cash flows on

¹The notion that the structuring of financing arrangements potentially adds value is controversial. A basic canon of modern finance theory concerns whether or how a firm's value is affected by its financial policies. In its original form, Modigliani and Miller (1958) demonstrated that, under rather restrictive assumptions, the financial policies of a firm are irrelevant and value is added not by financial structuring but by asset allocation decisions. Although beyond the scope of the present argument, corporate finance scholars, including Modigliani and Miller, generally concur that financing policies such as risk management may increase firm value by reducing expected taxes, reducing the firm's potential costs of financial distress, increasing a firm's debt capacity, or reducing a firm's borrowing costs. A careful review of these topics appears in Smith, Smithson, and Wilford (1989).

outstanding indebtedness, (b) lock in the cost or spread on an expected future issue of debt, and (c) reduce the cost of issuance by arbitraging the disparities in pricing between the cash markets for debt and the swap markets (for example, call options are frequently cheaper in bond markets than they are in swap markets, low-rated issuers have a comparative advantage in financing at floating rates, and so forth).

Kalotay and Williams (1993) observe that one does not have to use derivatives markets to benefit from them. They present a realistic scenario in which a corporate treasurer receives valuable guidance by simply observing pricing in the swaptions market—the market for options on interest rate swaps. Based on swaptions prices, the treasurer determines to his surprise that his firm would lose money by undertaking a seemingly attractive refunding of an outstanding bond issue. The reason is that prices in the swaptions markets reveal that the market value of the treasurer's option to refund his debt in the future is substantially greater than the present value of the cost savings from an immediate refunding. In short, the derivatives market reveals values that provide important guides for making decisions that pertain to conventional finance.

Derivatives drive the integration of cash markets by reconciling the pricing in fixed-rate and floating-rate markets, in currency markets, and in markets for the future exchange of assets. Broadly speaking, they add to social wealth by increasing end users' options. The socioeconomic value of derivatives in these contexts is just beginning to be realized. This value can be compromised, however, by unwarranted regulation or by poor management of the relationships between sellers and end users.

In summary, corporations stand to add value by using derivatives products if those products continue to be free of most government regulation. Bank-delivered RMS that facilitate corporations' access to these products, with proper information and incentives, can and should be structured to add value for both buyer and seller.

RISK MANAGEMENT IN THE EVOLUTION OF CORPORATE FINANCE

Exotic derivatives—especially those that are intensely engineered with mathematical and computer models—lack transparency. It is not surprising that a great many treasurers of corporations that experienced losses on exotic derivatives complain that they did not understand their exposures. As one assistant treasurer of a multinational chemicals firm queried concerning derivatives: “is this like cigarette smoking, where you have to put a warning on a package that says ‘This may be dangerous?’” (Myers, 1994).

The use of derivatives is just one of many facets in the growing com-

plexity of the finance function. Increasingly, treasury operations transcend just raising and investing funds, arranging foreign currency transactions, supervising the corporate pension fund, and managing the corporate banking relationships. Lessard (1991) identifies two forces driving this transcendence in financial management. These are the globalization of competition in product and factor markets and the deregulation and integration of world financial markets. In parallel with global market and competitive integration, corporate treasuries are under pressure to use and manage the exploding analytical and information technologies underlying modern financial transactions.

Lessard observes that the developments in the competitive and financial environment are "creating two often opposing pulls on financial management." (Lessard, 1991, p. 59). One pull is that it is compulsory for corporate finance professionals to deepen themselves in financial technology and, hence, increase technical specialization. The other, opposite, pull requires the finance function to completely integrate itself into corporate strategic, and even operating management decisions.

The macroeconomic risks arising from changes in interest rates (including relative changes across international interest rates), currency exchange rates, and major commodity prices forces greater interaction between finance and operations. For example, finance operatives must be able to advise on the feasibility and effectiveness of financial hedges, based on an understanding of a company's currency exposure and product pricing strategies.

The resulting need for greater depth in financial technology, on the one hand, and the need of finance to interact with strategic and operating aspects of companies on the other hand, defines a new kind of finance professional. In the future, advanced expert financial managers will span the gulf between broad generalists and deep financial technical specialization.

Risk management and the use of derivatives play directly into Lessard's call for such expert financial managers. Relative to his first point, greater financial analytical sophistication is needed to understand the deepening of financial information and technologies, including especially those that underlie new, complex financial instruments.

On Lessard's second point, because of expanding globalization, financial managers must protect their firms' profits and competitive viability by participating at the strategic and operating levels. Their firms' global operating divisions and each of the divisions' competitors have a different set of exposures to exchange rates, interest rates, and commodity prices. Hence, fluctuations in these key market prices exert differential effects on the divisions and their competitors. Corporate finance professionals must be adept in analyzing the risks and rewards of decision making under these fluctuating conditions.

In addition, corporate finance professionals need a command of the

new financial technologies combined with an understanding of operational and strategic issues in order to use derivatives knowledgeably. With such background, they will improve their risk-management performance by tailoring derivatives to manage operating and strategic risks. For example, they might apply derivatives to exploit price differentials across global financial markets and to distribute certain financial risks to others when the firm does not have the systems to manage such risks.

Firms differ, however, in the way that they view risk management and apply derivatives. Some are beginning to view derivatives as opportunities for pure profit. An increasing number of corporate treasurers have become more aggressive about leveraging the risk of their derivatives positions in an attempt to enhance earnings independent of the firm's bread-and-butter operations. In part, corporate treasuries may be trying to prove their worth in an era of downsizing (Lipin, Bleaksley, & Donnelly Granito, 1994). In addition, many corporations are releasing spare cash by implementing lean manufacturing concepts such as intensive inventory management and the concept of "zero working capital management" (Tully, 1994). As these firms generate newfound troves of cash from inventory reductions, their treasuries are under pressure to enhance yields on the cash.

These developments reinforce the movement to multifaceted treasury management with a view of the finance function as a business in its own right. Recent surveys reveal that perhaps 20% of major companies view their treasurers' offices as profit centers and not simply as offices that manage the raising and investing of funds (*Euromoney*, 1994).

Lessard considers such corporate treasuries as *transactional* in addition to *operational* (Lessard, 1991, p. 64). These risk-tolerant treasuries might include among their functions nontraditional activities such as securities trading and the engineering and packaging of their firms' own securities offerings normally associated with investment banking. Such expansion in the corporate treasurer's mission may have been a precursor to speculative activity and the large losses taken by numerous firms that acquired exotic, nonoperationally oriented derivatives from bank sellers.

Most corporate treasuries are not structured to manage transactional risks of this kind. Most importantly, they are at a disadvantage in conducting profit-oriented derivatives transactions. Compared to the money center banks, corporate treasurers' offices lack the intensely trained mathematicians and the sophisticated models and computer hardware to keep track of often obscure derivatives pricing or to conduct computerized stress simulations necessary to understand their exposures. Also, corporate treasuries lack clear policies and the independent audit capabilities needed to control risk in activities, such as derivatives speculation, that fall outside of their accus-

tomed range of operations. These deficiencies probably cost financial risk-taking firms vast sums when the markets turned against them in 1994. In the words of one bank derivatives officer, the fact that corporations lose hundreds of millions of dollars “in something that is not in their line of business [is] pretty incredible” (Lipin, Bleaksley, & Donnelly Granito, 1994).

FLAWS IN PAST MARKETING STRATEGIES

The evolution of multidimensional corporate finance professionals noted by Lessard should prompt banks to make significant changes in their staffing of RMS marketing. Banks should recognize that they need RMS representatives who are as well balanced in operational, strategic, and technical dimensions as their corporate customers.

Historically, corporate client relationships were mainly the responsibility of banks' relationship managers—generalists whose task it was to build and maintain communications and rapport with corporate financial officers. The relationship manager served as the conduit through which information about clients' credit needs and other status flowed. In an earlier era, when the massive credit requirements of large corporate borrowers were automatically serviced by their primary banks, the relationship manager enjoyed princely influence. This influence began to wane when large corporations discovered a cheaper substitute for bank funds by borrowing directly in money and capital markets. Competition from nonintermediated sources of credit shifted the influence within the bank to bankers who were more creative in structuring and packaging the credit needs of corporate borrowers. In the 1980s, credit structuring and packaging was extended beyond the balance sheet to credit enhancement and capital markets products—primarily derivatives—for reducing and stabilizing the cost of corporate borrowing.

Derivatives became a greater factor in the overall risk-management structure of many corporations. With rapidly breaking developments in derivatives, the influence of derivatives specialists on bank corporate relationships increased dramatically and reduced the influence of traditional relationship managers. Indeed, derivatives appear to have helped banks' credit programs to succeed. Recent evidence indicates that banks use the sale of derivatives to increase the effectiveness of their marketing of loans to corporate clients (Moser, Brewer, & Minton, 1994).

Commercial banks have been locked in fierce competition with each other to sell derivatives and risk management services to corporations. The competition has been especially great since the rapid expansion in derivatives markets dating from the early 1990s. Critics accuse banks and their derivatives specialists of ignoring their clients'

intrinsic needs for risk reduction and, instead, applying their efforts to develop exotic products with the largest profits and to outposition their rivals. Financial officers of large corporations complain that banks' sales pitches for esoteric new derivatives products and strategies, frequently presented in urgent telephone calls or fax messages, have proliferated (Myers, 1994, pp. 38–39). These efforts indicate a strategy that pays more attention to the banks' short-term opportunistic earnings than the interests of long-term bank-client relationships. The problem with such an approach is that it leads to the shallowing of valuable corporate banking relationships. Moreover, it undermines the impartiality that is necessary for banks to nurture trusting, long-term relationships.

As long as banks' corporate customers profit from their use of derivatives, the banks' selling pressure is, at worst, an irritant. When they incur losses, however, it is a different matter. In the short run, the series of losses by major corporations on derivatives sold by banks is a blow to the image of the banks and their derivatives sales units. The losses jeopardize future derivatives business with the losing corporations and, therefore, a large component of the banks' recent earnings. And, accusations that the banks lured corporate clients across the line of imprudent finance put their derivatives units on the defensive. Worse, the publicity that derivatives-selling banks receive when their clients suffer losses may cause other solid corporate relationships to weaken (Lipin, Donnelly, Granito, & Scism, 1994). In the long run, banks must learn from these events in order to build more enduring relationships with corporate end users of derivatives.

CONCLUSIONS AND RECOMMENDATIONS

One might suppose that, in the future, bank corporate customers will produce their own risk-management systems rather than buy them from banks. However, such a result is highly unlikely. The large banks have insurmountable advantages as resources for corporate risk management. For example, they have built knowledge bases on derivatives instruments that not even their largest corporate finance clients can duplicate. They have gained intimate knowledge of the markets' pricing behavior because of their huge volumes of transactions. Also, their knowledge of and rich experience with markets, along with advanced technical capabilities, have helped them create and model ingenious varieties of derivative products. Finally, their risk-management customers benefit from knowledge banks gain from serving many risk-management customers.

However, to maintain their advantages in and maximize the benefits of marketing risk-management services to end users in the future, banks will need to implement two fundamental changes. The first

change is the reskilling of a new class of relationship managers whose incentives are aligned with benefits received by the client. The second change is to equalize risk information between buyers and sellers.

Reskilling Bankers and Aligning Incentives. In the first instance, the future demands on banks' corporate finance units will call for a greater integration of operational and transactional finance talent. This development will parallel a similar integration of finance functions by their corporate clients. In Lessard's terms, the call is for "expert managers"—that is, neither specialists nor 'thin veneer' generalists," but managers who can operate in the twin domains of technical finance and strategy (Lessard, 1991, p. 60). They will have to function in a world of dramatically deepening financial technology (the intellectual assets of many bank derivatives units already measure up to this challenge), coupled with growing operational and strategic demands on the finance function.

Tomorrow's relationship managers should be deeply trained in technical finance and, at the same time, should understand clients' operational as well as strategic issues. They will be called upon to communicate in the same language of finance and at the same operational level at the client (also an expert manager). They should also have a comprehensive grasp of how derivatives products affect clients' risk profiles and performance. The banks' expert finance representatives, not derivatives specialists, should be in charge of any risk-management relationship that is based in client's operational finance functions as opposed to trading or income-levering transactions. (As a precursor to such a structure, Bankers Trust placed its derivatives unit under the authority of relationship management in response to pressure from the aforementioned losses suffered by its derivatives clients (Lipin, 1994b.)

For example, the bank corporate finance expert should be facile in more than just interpreting the volatility of exchange rates to create a hedge or to generate trading profits. The expert must also correctly analyze how exchange rate volatility might affect the dollar value of clients' foreign profits and how changes in currency values bear on product pricing, output decisions, and the sourcing of that output.

Bank income from RMS and derivatives sales should be tied to the benefits of risk-management systems. Relationship managers should be motivated in accordance with how well the systems fulfill client objectives for risk control and profit protection. Compensation should be related to the ex post performance of transactions, for example, the success of hedges.

Equalizing Buyer-Seller Information. Information about derivatives risk is asymmetric. Information known to bank derivatives originators is diluted when it flows to client's finance personnel. It is

diluted further when it flows to corporate executive managements and boards of directors. To better equalize information and protect themselves from liability, banks should promote well-defined client risk-management systems with formal controls.

For example, when called upon to support client nonoperational activities such as trading, speculating, or securities engineering, banks should require that treasurers obtain explicit authority from their corporate boards for such transactions, including position limits and loss tolerances for each type of service. Bank relationship managers should disclose the probabilities that positions sold will exceed loss tolerances. Nonoperational transactions may be acceptable for corporate treasuries designated as profit centers, but the transactions should be organizationally compartmentalized from traditional corporate finance functions.

In general, remedies for resolving the problems of asymmetric information must be centered on monitoring and disclosure. Client derivative positions should be marked-to-market daily. Clients should be cautioned when, in the absence of reliable trading data, positions must be marked-to-model and advised about the availability of independent price estimates. Also, at the time of sale, banks should present stress simulations of the loss exposures for exotic derivatives under routine events as well as under, say, 2 or 3 sigma events. Banks should disclose the details of their pricing and disclose normal and stress scenarios when the banks' payoffs are not aligned with clients' payoffs.

In the end, redefining the skills required of bank relationship officers and structuring information flows that coincide with client needs are in banks' own interests. By making such adaptations in their marketing of risk-management services, banks stand to protect and maximize the present value of their long-term corporate relationships.

REFERENCES

- Beckett S. (1993). Are derivatives too risky for banks? *Economic Review*, 78(Third Quarter), Federal Reserve Bank of Kansas City, 26–42.
- Celazier, M. (1994, May). Did they just get it wrong? Or was it something worse? *Global Finance*, 8, 43–47.
- Euromoney (1994, August). Euromoney corporate derivatives questionnaire. *Treasury and Risk Management*, p. 34.
- General Accounting Office, United States. (1994). *Actions needed to protect the financial system* (No. B-257099). Washington, DC: Comptroller General of the United States.
- Goodman, L. (1989, Summer). The use of interest rate swaps in managing corporate liabilities. *Journal of Applied Corporate Finance*, 2, 35–47.
- Group of Thirty (1993). *Survey of industry practice*. Washington, DC.

- Kalotay, A. J. & Williams, G. O. (1993, Fall). How to succeed in derivatives without really buying. *Journal of Applied Corporate Finance*, 6, 100–103.
- Lanchner, D. (1994, May). How Europe's banks escaped—or can cover up—the damage. *Global Finance*, 8, 46, 47.
- Lessard, D. R. (1991, Winter). Global competition and corporate finance in the 1990s. *Journal of Applied Corporate Finance*, 4, 59–72.
- Lipin, S. (1994a, November 25). Gibson Greetings reaches accord in suit against Bankers Trust over derivatives. *Wall Street Journal*, 131, p. A3.
- Lipin, S. (1994b, November 14). Bankers Trust reassigns executives in midst of internal sales-practice probe. *Wall Street Journal*, 131, p. A5.
- Lipin, S., Bleaksley, F. R., & Donnelly Granito, R. (1994, April 14). Just what firms do with derivatives is suddenly a hot issue. *Wall Street Journal*, 131, pp. A1, A7.
- Lipin, S., Donnelly Granito, B., & Scism, L. (1994, April 22). Bankers Trust thrives on pitching derivatives but climate is shifting. *Wall Street Journal*, 131, pp. A1, A5.
- Migliani, F., & Miller, M. H. (1958, June). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48, 261–297.
- Moser, J. T., Brewer, E., & Minton, B. A. (1994). Banks' use of interest rate swaps and business lending. In *Bank Structure and Supervision Conference*, 26. Federal Reserve Bank of Chicago.
- Myers, R. (1994, May). Is this how banks sell derivatives? *Global Finance*, 8, 36–40.
- Nusbaum, D., & Reerink, J. (1994, December). Clear and present brokers. *Futures*, 23, 56–62.
- Shuriff, D. (1994, August). Fill that gap. *Euromoney*, 28–34.
- Siems, T. F. (1994). Financial derivatives: Are new regulations warranted? In *Financial Industry Studies* (pp. 1–14). Dallas: Federal Reserve Bank of Dallas.
- Smith, C., Jr., Smithson, C. W., & Wilford, D. S. (1989). *Managing financial risk*. New York: Harper & Row.
- Smith, R., & Lipin, S. (1994, August 25). As derivatives losses rise, industry fights to avert regulation. *Wall Street Journal*, 131, pp. A1, A4.
- Tully, S. (1994, August 22). Raiding a company's hidden cash, *Fortune*, pp. 82–88.

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Donald G. Simonson is New Mexico Bankers Professor of Banking and Finance, Robert O. Anderson Graduate School of Management, University of New Mexico. Correspondence should be addressed to Donald G. Simonson, Robert O. Anderson Graduate School of Management, University of New Mexico, Albuquerque, New Mexico 87131.