

The Market Chronicle

SERVING ALL SECURITIES MARKETS AND THE FINANCIAL COMMUNITY

Vol. 20 Number 32

NEW YORK, N.Y., August 14, 1986

Price \$1.25 a Copy

Be On Guard in the Glittery World Of Financial Innovation

Eugene H. Rotberg

The esoteric instruments, strategies and techniques that have sprung up in the past ten years as a result of deregulation and unforeseen volatility quite often turn out to be something less than meets the eye. World Bank vice president and treasurer Eugene H. Rotberg is a pro, in every sense of the word, on this subject. His remarks below, based on his informal address to the Institutional Investor Conference of June 27, 1986, New York City, exposes the sham and the nonsense that goes on.

Financial innovation is a new and challenging field.

First, why all these new forms of "innovation"? [They have sprung up] in the past decade of volatility and deregulation, [as a consequence of]:

1. Volatile exchange rates
2. Volatile interest rates
3. Uncertain access to funds
4. Change in world volume and patterns of savings
5. Increased government borrowings
6. Restrictions on flows of capital in some countries; deregulation in others
7. Capital flight
8. Increasing competition amongst intermediaries for interest rate sensitive assets
9. BPO shifts (Oil price changes)
10. LDC debt crisis
11. Increased communication links

Handling Volatility

Given volatility, how do managers and their staffs in fact, make decisions. What are the "instruments"? There are a number of factors which affect "decision making" in any organization.

Probability theory—Realm of mathematics. A pretense for the numerator:

- The certainty factor—while death is inevitable and control is not possible, we try to exercise control in our careers. In finance we pretend to predict risks or market behavior. It gives us a sense of control

where it may not be available elsewhere.

- How much is the loss—The dread factor. Will we be wiped out if we move too soon or too much. If yes, be careful.

- Will we be found out? Discovered? Identified as the wrongdoer—the recommender of unwisdom? It's one thing to be wrong, another to be identified.

- Will we be harassed? By peers, superiors,

the bureaucracy. By Boards because they do not understand and may wish to cover their lack of information under the cover of prudence; because they are frightened by stockholders suits. Because recommendations from subordinates are threatening the superiors' acclimation with the system particularly if the new ideas come from the youngest and brightest.

- Have we experienced the pain: made mistakes; seen fortunes or lives damaged by unanticipated market moves? Or is it referred pain, historical, read about. Did we actually experience that sinking feeling when rates rose from 8 per cent to 16 per cent and we held long-term bonds?

- The comfort in knowing that opportunities lost are rarely measured when rates dropped from 16 per cent to 10 per cent. Were we held accountable for not having bought long term bonds? Probably not.



EUGENE H. ROTBERG

- The herd instinct. Everyone's in options or futures.
- The availability or rewards and punishment for rightness or wrongness.
- Present pleasure—future pain: let someone else pick up pieces. (Lend now, collect later.)

My job as manager of a financial complex is to reduce or eliminate the above factors in developing a financial policy which makes sense. The bottom line is that our egos, fears of potential punishment or rewards, the extent to which accounting conventions permit us to cover up or look better than we are, have nothing to do with interest rates, currency movements or the availability of resources.

Reasons for Innovating

Given volatility in markets and a rather complex environment for making recommendations and making decisions, what are the reasons given by financial advisors/manager for wanting to innovate and "protect" their institution? All start off by talking about volatility, risk and exposure. Later, however, after extensive psychotherapy or cross examination (depending on the style of the father figure), the following reasons emerge:

1. Capture real economic profit—simply, create new instruments and hope you get the arbitrage, basis risk, and hedging strategy right.
2. Cut future anticipated real losses—buy insurance, i.e. options.
3. Create unreal public accounting effects—record gains by taking them—avoid "losses" by not taking them.
4. A desire to remove the pressure which causes the financial manager to be risk averse because of absence of liquidity, i.e., don't buy 30 year bonds in size; if one is "wrong" we can't get out. Therefore institute a futures program. The effect is simply that, inevitably, futures cause one not to have the same sense of market risk—fear—in making initial decisions, because you can "liquidate," through the process of marking to market, if wrong.
5. It is visible? Does it look good? Example: Fool the CEO by embedding warrants in the bond and pretend that past volatility correctly prices warrants.
6. The use of new instruments provides a learning vehicle for less complicated stuff!
7. Leverage is fun.
8. Force mistakes to be shown. A tough test because of marking to market implicit in the innovation.

The key is for manager to know:

- Which are the real reasons?
- Are they acceptable?
- Has the objective in fact worked out in practice. Don't switch objectives after the fact because the objectives are so diverse, any outcome, can be justified.

On balance, financial innovation will force participants to make visible their errors through marking to market or paying for insurance. The end result is that there will be pressure to be measure liability performance, just as we now measure asset performance.

Check Points

What considerations should as a borrower be concerned about in considering transactions brought by banker intermediaries?

a. Is the new instrument a loss leader for future business.

b. Is it a profit center? How do they cope with the profitability or lack of it of the various parts? Swap desk; underwriting desk; foreign exchange desk.

c. Will the risks taken by our bankers be sold off? To whom? At what cost? Will our name be involved? What will be the effect on secondary markets?

d. Can the firm really produce what the new products division is offering? Who is in charge of overall risk management at the firm? Do we care? Should we care?

5. All of us must also recognize and understand the regulatory concerns over financial engineering:

- difficulty of control of money supply
- excessive credit risk by non-banks
- increased volatility of markets

- who should take credit risks

All are issues of concern to regulatory authorities as commercial banks in response to the rather narrow profit margins on straight lending, seek to increase off balance sheet service income, leverage and take market, as distinguished from credit risks.

No Fool Proof Guarantee

Do not assume that innovative instruments and financial engineering, however, avoids risk or even hedges it. Many of the instruments are based on:

- Paying insurance which can carry a very expensive cost (options).

- Bracketing a narrow certain range of profit, i.e., produce certainty while foregoing profit.

- Pretending that a given time frame for the investment or borrowing decision is the "right" or "wrong" one.

- There is rarely a "perfect hedge" and if there is it will either carry a cost or be useless.

Oversold Innovations

Many new instruments have developed because of peer pressure; they are poorly priced with little academic or market rationale. Most innovations have uncertain economic benefit—they typically involve a sharing of unknown risks for unknown benefit at a price which is simply market clearing. There also is a bit of the 'herd' instinct—by intermediaries, issuers and investors. There is competitive pressure to simply execute the latest instrument for a client or to create the next one, whether or not it makes sense, simply because it is market clearing at a cost which appears low compared to some other benchmark.

A Challenge

Essentially, innovation reflects the ingenuity to finish the sentence, "I promise to pay you ..." in a multiplicity of ways; e.g.:

- Who are you?
- What will you pay?
- Is it unknown or known, fixed or floating, or indexed?
- When are you paying it?
- To whom are you paying it?
- Under what circumstances will you pay?
- With what kind of extra rights or penalties?

Each of these variables can produce real

gains, unreal gains, hide risks, avoid opportunity cost or measure opportunity costs. The objectives are so diverse, they always, one way or another, will let one argue or pretend that the decision was a wise one.

Senior managers and their regulators will find it a challenge—to say the least—to find out what is going on and whether it makes sense. But unfortunately, I suspect wisdom ex post will likely be measured by an accounting convention.

Figure This One Out

Permit to conclude with a transaction:

- A bank makes a loan to an LDC in fixed-rate dollars.

- The loan is converted into a security and sold into the trading market, with a 20 per cent guarantee by an AAA insurance company.

- The LDC does a cross-currency interest swap with an investment bank, whereby the investment bank exchanges with the country floating-rate dollars for fixed rate DM, every quarter.

- The investment bank buys an over-the-counter option from another commercial bank to cap the floater at 12 per cent. That means if short-term rates go above 12 per cent, say to 15 per cent, the investment banks will receive \$3 on each hundred from the commercial bank, to add to its \$12, to exchange with the LDC for fixed-rate DM.

- The LDC now buys a currency option from the Philadelphia exchange for protection on the DM rate.

This is just the beginning: The permutations could go on and on. And consider the sources and transmission of instability that exist because of the pyramid of intermediation. If the LDC has liquidity problems, it is impossible to reschedule given the diversity of security holders who have become lenders—whether or not "of record." Moreover, the quality of the asset can be impaired by problems at the options exchange (for DM), problems at the second commercial bank (for the swaps exchange), and a downgrading of the insurance company (for the underlying value of the dollar asset).

Now I ask you, who cannot, given the opportunities to: (a) measure real gain, or (b) opportunities not lost, or (c) create accounting effects, or (d) describe what could have been, not find in that transaction, something wise or profitable in every piece for every participant.