Eugene Rotberg

A 40-year retrospective

Gene Rotberg was, for almost 20 years, the legendary Treasurer and Vice-President of the World Bank – and almost the sole begetter of the global swaps market. From 1987 to 1990, he was Executive Vice-President of Merrill Lynch.

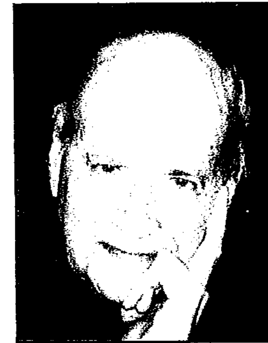
When I look back some 40 years ago, I think first of clichés and names. Globalisation, integration of markets, dismantling of controls, cross-border transactions, information technology, quants, derivatives, Salomon Bros, CSFB, Barings, Paribas, the Belgian dentist, Japan controls everything, Yassukovich, Von Clemm, John Craven, Minos Zombanakis, Wilfried Guth, Hans-Joerg Rudloff.

I am then reminded of transactions: floating rate notes, short-term bonds. Pricing at any cost – even though the pricing would likely bury underwriters under their own tombstones. It was a time when Ministries of Finance controlled who could borrow in their currency – and even then only with "domestic" underwriters. For 30 years, no borrowing by any "foreign" borrower in France or Italy or the United Kingdom. Zero coupon bonds, perpetual bonds. Ah, if we borrowers could only have both in the same instrument – zero coupon and perpetual maturity.

And competition. Fierce competition between Amro and ABN, between Swiss Bank Corporation, Credit Suisse and Union Bank. The Swiss had good reason to compete for mandates: their underwriting commission was higher than the prevailing interest rate. Intense competition between Nomura, Daiwa, Yamaichi, Nikko. Between Deutsche Bank and Dresdner.

Inevitably, over time, circumstances led to change and complexity:

- We first worried about how to hedge against inflation. For a decade, interest rates had fluctuated less than 1%. Then came inflation. How to protect investors?



Answer: Invest in short-term bonds or at floating rates. The Bundesbank was upset. It did not like instruments that could provide a hedge against inflation. It was concerned it would remove the political pressures against inflation.

- Then how to hedge currency risk – after currencies were "unfixed" in the early 1970s?

Answer: Futures and derivatives - first to hedge, then to speculate.

- There was still a risk left in the bond market. How to limit credit risk?

Answer: Credit swaps.

- Then how to manage liabilities, which we wanted to dispose of either because we wanted to stem losses or take the gains arising from currency or interest rate fluctuations?

Answer: The swap market. The world of liability management came into being.

- How to hide mistakes?

Answer: Off-balance-sheet trades. Don't mark-to-market. That led to a sense of unreality. That is, until very recently when auditors, partly from fear of being accomplices, began to mark-to-market – with a vengeance, valuing assets well below their underlying cash flows. But not marking to market the liability side of the balance sheet, only the asset side, creating an asymmetry – the cause of great turmoil and pain currently.

- How to avoid reporting losses?

Answer: Keep lending. For banks, the LDC debt crisis in the early eighties provided the opportunity. A rolling loan gathers no loss.

- How to lend without fear of the capacity of borrowers to repay?

Answer: Securitisation. Package the asset and get rid of it fast. Not to worry about prudential lending standards. A very dangerous development.

- How to avoid risk?

Answer: Structured finance and credit enhancement. Let someone else figure out how to hedge the protection we were providing.

- How to compete?

Answer: First, repeal Glass-Steagall. Then, develop a compensation system which rewards success and hardly penalises failure. Again, an asymmetry that would inevitably lead to an incentive to take risk.

- How to avoid disclosure of what we were doing?

Answer: Form a hedge fund.

- How to increase our return on capital?

Answer: Leverage, or manage other people's money – or both.

But despite these activities, risk never disappeared. It was simply shared or hidden or unreported, and in a world of increased leverage, it was to be ignored only at one's peril.

Permit me, therefore, to repeat here in 2009 what I wrote 25 years ago:

1. Liquidity risk: You think you are precisely hedged, but the product is so esoteric and idiosyncratic that you cannot sell it because there is simply no market for the product. You may want to either capture a profit or minimise a loss, and you can find no buyers. This is typical in the OTC derivative market or parts of the mortgage-backed securities market.

2. Credit risk: Your counterparty has lost money and fails. You were on the right side of the market; unfortunately your counterparty was on the wrong side. Or, your counterparty would ordinarily be just fine, but its counterparties, strangers to you, default.

3. Legal risk: The laws in Asia and Western Europe are not nearly as clear as those in the United States. You believe that you are totally netted with a particular counterparty; that you had a net zero position and, in the event of default and bankruptcy, you would be protected. It turns out that the netting rules outside the United States are not so clear, and you may have to get in line with other creditors or depositors.

4. Event risk: A war takes place; an earthquake occurs; a flood of a magnitude not seen in a hundred years washes over the land; a cartel falls apart; oil prices quadruple; tax laws change, and the market in which you had an open position, or even hedged, moves in a magnitude not only unforeseen, but totally outside past models. They always do. We are in trouble.

5. Basis risk: You thought you were hedged. You believed that investment A hedged instrument B. You were long in one, short in the other. They, in fact, moved in the same direction. The three-year Treasury note in which you were long deteriorated in price, but unhappily, the five-year note, in which you had a short position, increased in price. You lost both ways. The only perfect hedge is in a Japanese garden.

6. Leverage risk: You are so leveraged that even a small market movement will prompt a margin call. The security which is out of line will move back to its normal position on the yield curve, but someone out there, for one reason or another, has chosen to put pressure on a particular coupon, a particular security, at a particular point on the yield curve, and while over the next week or two it will surely come back into line, in the meantime, you must liquidate. Worse, liquidation is difficult because the product is idiosyncratic. Your loss becomes very visible.

7. Operational risk: Back-office systems, yours or someone else's, fall apart; credit monitoring systems break down; documentation is flawed; transcription and recording mistakes are made; settlements are delayed; systems do not capture fully the nature of the transaction -- the computer program doesn't yet cover that kind of transaction (they are working on it). And, it is all quite expensive to put in place and keep it up to date. And, most important, there is no natural constituency to support the financial and resource expenditures that are needed, particularly if you are not supposed to be a profit centre and are trying to keep quiet the risks you are taking.

Despite the above, the financial community believed it could immunise itself somehow from all risk either by shifting the risk to someone else, hedging the risk, hiding the risk off-balance sheet, securitising the asset or simply not reporting it in a meaningful way to senior management.

The result was inevitable. One scandal or market disaster after another: the LDC debt crisis; Barings, Orange County, Daiwa, Sumitomo, LTCM, Salomon Brothers, Merrill Lynch, Enron. The current crisis is no different. It has a far greater impact, however, because of the domino effect, leverage, short selling, a run on banks and the resulting virtual standstill in the availability of credit.

Given recent events, there is the inevitable call for more regulation. But not to worry. (There are three saving graces. I hope I am wrong, but the danger is that I am right.)

First, the regulators have little idea what happens at the trading desk, how institutions finance themselves, with whom, with what kind of instruments, how derivatives are used to reduce capital requirements. They are not cognisant of the latest arcane forms of derivatives, how accounting rules mask risk (or increase it). They cannot "read" the risk books (nor can most senior managers even in the firms). They are not up-to-date with the latest forms of structured finance, how they are hedged, financed or leveraged, let alone the complex forms of collateralised debt obligations or the credit default swap market. Regulators, therefore, are not likely to regulate what really counts without a detailed understanding of the way different instruments are used and reported and exactly how the algorithms work.

Second, regulatory agencies, even within a country let alone world-wide, have different agendas, values and constituencies. They are not likely to agree on meaningful control over capital, leverage and securitisation.

Third, derivatives, even in their most arcane forms, fundamentally use government paper as collateral. If derivatives were limited, controlled or inhibited it would surely reduce the need for that collateral and, therefore, make it much more difficult to finance government deficits. Basically, that is why central banks historically have been reluctant to tamper with that market. Conclusion: Regulators will not mess with it.

In retrospect, I don't think much has changed over the years. It all comes down to why people do what they do. It may be appropriate, therefore, to speculate on what Sigmund Freud might have said about us. He, better than anyone, analysed and knew us quite well:

- he would have explained the use of derivatives and financial engineering as denial – the pretence that we are doing one thing when we really mean to do something else – we are not speculating, only hedging;
- the relationship between the client and his banker is one of ambivalence and reliance on a father figure;
- the use of accounting conventions – the absence of reality testing;
- the work environment as the pleasure/pain principle – current pleasure for future pain, let someone else pick up the pieces;
- doubling our bets in response to loss is counter phobic behaviour;
- termination therapy is what happens when the CFO and Treasurer get caught;
- transference – how the trader seeks to shift responsibility to his or her superior when the string runs out;
- leveraging is bulimia;
- dynamic hedging is desensitising;
- "I really prefer clearance and back-office work" – anal compulsive;
- "I relied on the risk manager" is but an interpretation of dreams; and
- the ultimate in narcissism, "I am the market."

Now, other than therapy, what might a manager do in recognising risk – beyond, of course –, understanding exactly what business he or she is in and exactly what the traders and financial managers do for a living?

First, it might be useful to admit some basic "characteristics" of our profession.

We respond to peer pressure. Develop and then sell that magic zero coupon bond with a perpetual maturity, so that a borrower need pay neither interest nor principal. We want to capture rewards quickly and visibly - so we can look good if we can't be good. We deny blame or responsibility. We seek not to be identified as the provider

of unwisdom. We do not measure opportunities lost. We rely on sympathetic accounting conventions. We design performance measures to cover up error. They are called benchmarks. Senior management is rarely as informed as operational managers. We make decisions based on: Will we be found out? Discovered? Identified as the wrongdoer? The recommender of unwisdom? Will we be hassled - by peers, superiors, the bureaucracy? Do we really want to have to explain this stuff to someone who spent his or her life in sales or marketing? We are subject to the herd instinct. Leverage is fun.

Though this is not the place to detail how we might get through the current crisis, there are some very interesting and useful ideas out there which might alleviate some of the current stresses. But beyond those market changes and government interventions, there remains the fundamental question as to how the business of finance is managed. I have some concluding suggestions:

- Admit we are not sure of all the risks.
- Admit what we don't know.

  - Show some humility. Admit we do not know everything – and that we don't know all the risks.
  - Figure out what we are really trying to do.
  - Try to understand why a transaction makes sense to your counterparty.
  - Talk...

- Ask "what if?" Quantify 'what if?'
- Clarify precisely what we are trying to do.
- Ignore accounting conventions. They are not useful risk management tools; they are designed to make our lives easier and comfortable.
- Always measure opportunities lost.
- Never penalise those who work for us for mistakes or reward them for being right about markets. It will go to their heads, is counterproductive and, in any event, material compensation will not correlate with their ability to predict the future next time.
- Ask for alternative approaches and costs to meet objectives.
- Spend resources on systems and people smarter than we are.
- Talk to them.
- Do not hire or maintain staff whose ethics are such that you would not want them to marry your son or daughter, or your mother or father.
- Try to figure out why the transaction makes sense to your counterparty.
- Most important, be modest. Admit to unsuredness and uncertainty.