Moral hazard: Heads I win, tails you lose

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BRITISH Prime Minister Gordon Brown has said that the week of Sept 15 would be studied for years to come as 'the week the world was spun on its axis - and old certainties were turned on their heads'.

Within that single week, Lehman Brothers filed for bankruptcy, Merrill Lynch and HBOS sold themselves to the Bank of America and Lloyds Bank respectively, the United States government bailed out American International Group, and then asked Congress to appropriate US\$700 billion (S\$1 trillion) to rescue the financial sector.

At the core of the financial crisis and ensuing mess lie two words - moral hazard.

The term originates from the insurance industry. It refers to a situation with two ingredients: a conflict of interest where one party bears the consequences of the actions of the other, and where the party bearing the consequences cannot control the actions of the other.

Sounds complicated? Actually, it's quite simple. Consider the NTUC Income i-MediCare insurance, which covers my university's staff. For any visit to the general practitioner, I must pay \$5 and NTUC Income bears the rest.

Having incurred my \$5, do I choose generic or branded drugs? The generic may cost only one-tenth as much as the branded drug, but it doesn't benefit me to economise. NTUC Income cannot control my choice of drug, but it bears the full financial consequences of my actions.

Motor vehicle insurance provides another example. Car owners who are covered by comprehensive insurance may not be careful. That is precisely why the insurance industry invented the concept of the 'no-claim bonus' to encourage car owners to be careful. The bonus aligns the interests of the insurer and car owner.

The medical insurance industry also recognises the potential for moral hazard. Many plans include an element of co-payment: the more I claim, the more I pay out of my own pocket. This would give me an incentive to choose cheaper drugs and minimise visits to the doctor. How did moral hazard lead to the current financial crisis? This story is as old as the Latin American loans that dragged down US banks in the 1980s.

Wall Street banks famously pay their senior employees relatively low salaries mere hundreds of thousands of dollars a year. They depend on incentive compensation - bonuses, profit-sharing, performance shares, stock options - for the bulk of their income. They are almost compelled to bring in large volumes of business and profit. A quick way of raising profits is to use leverage.

Suppose that with \$1 million of capital, a bank lends \$1 million at 5 per cent interest. Its interest income would be \$50,000 and its return on capital would be 5 per cent. Now, suppose that in addition to the \$1 million of capital, the bank borrows \$9 million at 4 per cent (leverages up by nine to one). It then lends \$10 million at 5 per cent. Its interest income would be \$500,000. It must pay \$360,000 on its borrowings, so its net income would be \$140,000. Thus its return on capital would be 14 per cent!

Marvellous. The bank would enjoy higher earnings and it would certainly reward its staff accordingly with bonuses, performance shares and stock options.

In recent years, investment banks have offered such lucrative compensation that they were among the top choices of graduating MBAs. Mr Richard Fuld, chief executive officer of Lehman Brothers, was reputed to have earned US\$45 million last year. Such fabulous compensation even lured top finance scholars to quit professorships with lifetime tenure to join Wall Street.

How could investment banks earn so much to pay so much? Leverage. Investment banks are 50 per cent or more leveraged than commercial banks.

Where's the moral hazard in leverage? Isn't everyone happier?

In leveraging up, a bank takes on more risk. One source of additional risk is the funds borrowed. The bank might not be able to renew its borrowings at the same rate - as happened to Lehman Brothers recently and Bear Stearns earlier.

Another source of risk is the quality of the borrowers. When a bank increases lending from \$1 million to \$10 million, it is bringing in new clients. Are the additional clients as reliable and creditworthy as those who borrowed the first million? Probably not.

But, and here's the rub, the additional risk won't be obvious while the bank is leveraging up. These additional risks will become apparent only later - months later, perhaps years later.

While the bank is happily leveraging up to increase lending, it will record ('book' in the jargon of the trade) nice increases in profit. Shareholders would be delighted and bank managers would collect their incentive compensations.

The moral hazard arises because the additional risks materialise only later, but by then, the managers would have collected their bonuses. Many might have left the bank. Indeed, some might even have retired to sunny Caribbean resorts.

Who carries the baby when the bank encounters difficulty in renewing its borrowings or its borrowers default? The shareholders of the bank - and possibly, if the bank is big enough, the government. But that is another story.

A related moral hazard arises from securitisation. Financial institutions provide home buyers with money through mortgage loans. In a bygone era, the financial institution would own the mortgage and collect interest and repayment.

Today, however, financial institutions package the mortgage loans into bundles called mortgage-backed securities, which they sell to investors. The mortgage-

backed securities might even be further repackaged into collateralised debt obligations. This complex process is called securitisation.

As my colleague, Professor Anand Srinivasan, will argue later in this series, banks are less rigorous in approving borrowers for mortgages that they intend to securitise as compared with mortgages that they hold. This is moral hazard, clear and simple, and to be expected. Why work so hard and be so careful when someone else will bear the consequences? Collect the fee for the mortgage and pass the risk to others.

However you look at it, banking - especially investment banking - is beset with moral hazard. Heads I win, tails you lose.

The writer is Lim Kim San Professor of Business Policy and Professor of Information Systems and Economics at the National University of Singapore. This is the second of eight articles in the ST-NUS Business School Series on the financial crisis.