

**Asia Pacific Capital Markets Congress**

**“Systemic Risk: Who’s Watching the Baby?”**

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**Keynote address**

**by**

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**Introduction**

I must admit that in choosing the title of my speech, I hoped it would pique your curiosity and interest, particularly as many might not expect a regulator to pose such question. So first – let me explain the significance of the question. As a parent, I know that if I am looking after the children I am very focussed. If there is a group of adults – that focus is somehow diminished as we all assume someone else is watching. For those of you who are parents here, I am sure you are familiar with this situation. The baby I want to talk about today is “debt” – and in particular the more exotic forms of debt that have been collateralised, securitised, sliced and diced, repackaged, onward sold and dispersed off the balance sheet of the lending institution into a myriad of hands including both traditional and alternative funds, – in this world – who is watching the risk? Many of you will have enjoyed the fireworks and celebrations to mark the 10<sup>th</sup> anniversary of HK’s return to the Mainland. But, 2007 also marks the anniversary of two other watershed events – Black Monday of 1987 and the Asian financial Crisis that erupted in 1997. I thought it would be opportune to remind ourselves that markets, whilst generally more efficient at pricing risk, - and we have enjoyed a period of growth, stability and historic lows of volatility, - still have the power to surprise us and yield sharp corrections. The hallmark of efficient functioning markets are those where participants constantly reappraise risks and reward – but occasionally, unforeseen connections can lead to very sharp re-appraisals of risk and liquidity.

We do set certain standards of investor protection and we watch carefully for systemic risks to ensure the financial system is robust – but efficient markets work best when demand and supply interact freely.

Regulators and policymakers cannot and should not try to eliminate risks so as to prevent financial shocks, for there would be no functioning markets to talk about. Their challenge is to strike an appropriate balance between promoting market efficiency and maintaining market or financial system resilience.

Equally important, market participants individually determine the level of risks they are prepared to take and therefore collectively what the market is able and willing to bear. Market discipline, therefore, has a critical role to play in contributing to financial stability. This involves governance, risk management, internal controls, ethics and conduct.

Alas! Now that I have uttered the mantra of market discipline in managing risks the title of my address may appear less curious and alluring. If you travel with me in the next few minutes, I hope you would find it useful to see how the financial landscape has changed (or not) and how markets and regulators have responded to the growing complexity of financial instruments as markets have become more intertwined. At the end of the journey, we may find that we do not have all the answers, but it is more important that we ask the right questions so that we focus our attention on the important issues.

## **The 1987 Crash and the Asian Financial Crisis**

### *The 1987 Crash*

In the years prior to the crash of 1987, stock markets were buoyant, with price earnings outpacing earnings growth, prompting some to warn of overvaluation. Market support came from two sources – an influx of new players into the capital markets, such as pension funds, and favourable tax treatments given to the financing of corporate buyouts that helped drive up the stock prices of target companies. Several stock market records were made in 1987, and by August the Dow Jones was up 850 points or 45% from the August of the previous year. The Hang Seng index peaked at 3,950 on 1 October, 89% up from a year previously. The macroeconomic outlook, however, was less certain in the months preceding the Crash.

Globally, interest rates were on the rise, prompting concerns that a similar move would be necessary in the U.S., given the growing U.S. trade deficit and a weakening dollar.

What were the triggers to the crisis? As in any crisis, it is not one event but a confluence of factors that cause market sentiment to turn. The 1987 Crash was triggered by a bout of negative news of worse-than-expected deficits in the U.S. that weakened the dollar, a rise in interest rate and the filing of legislation to remove the abovementioned tax benefit for mergers. The Dow Jones started its decline on October 14, culminating in the sharpest single-day decline of 22.6% on Black Monday, 19 October, that sent shock waves around the world. The Financial Times 30 fell 10.1%; Japan Nikkei lost 2.4%, while Hong Kong lost 11.1%.

The severity of the crash has been attributed to several factors, such as the massive number and value of margin calls that dried up liquidity, the role of program trading and the lack of reliable information. Portfolio insurance had become the strategy of choice to protect the gains made in the run up of the market to 1987. Shorting index futures to hedge your cash portfolio is fine if you are the only one using this strategy – the problem was, everyone was using portfolio insurance and therefore trying to sell at the same time. Liquidity literally dried up.

### *The Asian Crisis*

Let's move on 10 years. In the years leading up to the Asian Crisis, the five affected countries received a net capital inflow of around \$120 billion in 1996. As capital flows reversed in 1997, the situation turned into net outflow of \$40 billion. This shock of about \$200 billion between 1996 and 1997 was about 10 percent of the combined GDP of these countries. The currency crisis quickly deteriorated into an economic crisis as foreign and domestic investors rushed for the exits. A vicious circle was created: stock prices plunged and margin calls and panic selling exacerbated the trend, currencies depreciated further as the capital flowed out, plunging more institutions that had foreign currency liabilities into insolvency, leading to a rapid rise in domestic loan defaults and a curtailment in bank lending. The classic liquidity problems of borrowers turned into insolvency problems, and the aftermath of the Asian Crisis necessitated massive corporate restructuring efforts. The shocks to the stock market, credit market and currency markets led to a downward spiral in asset prices that was self-reinforcing. The unprecedented levels of non-performing loans led to a credit crunch that plunged economies into a recession.

There was realisation that the integration of financial markets and the inter-dependency among open economies in a globalised world meant that there can be no insulation from external shocks. The global response to this global problem was the creation of the new financial architecture. The Financial Stability Forum (FSF) was established in 1999. The IMF enhanced its surveillance, and launched the financial sector assessment programme that assesses the level of implementation of 12 international standards that the FSF considers as key for sound financial systems.

The Asian Crisis had roots in structural weaknesses in the financial system, exchange rate regime and selective liberalisation of capital controls. The impact was severe and the fallout reverberated around the world. In contrast, the 1987 crash was triggered by a confluence of factors, and exacerbated by stress on the trading and clearing systems, the widespread adopting of portfolio insurance as a hedging strategy which meant every body was rushing for the same door.

That is my brief journey to two key episodes in recent financial history. Where are we today? What are the characteristics of today's financial markets? Are markets more resilient? What are the risks looming in the horizon? Are we ready to face future shocks?

## **The Present Financial Landscape**

### *Macroeconomic environment*

The world has been enjoying stable growth, subdued inflation, strong corporate earnings, and rising asset prices. According to the IMF, the world has enjoyed the fastest 4-year period of increase in global incomes in 30 years. Core inflation rates globally remain at 40-year lows, despite significant shocks to commodity prices. The financial markets in emerging economies are growing in size and integrating with the global economy. Emerging market economy domestically issued bonds exceeds US\$3.9 trillion and has become an important global asset class.

But the world is also witnessing record global trade imbalances that have been easily financed in an environment where exchange rates have remained quite stable. There has been much market speculation on how global imbalances will finally play out and whether the

unwinding will be orderly. This is a much longer-term problem for which the resolution is not obvious given huge geo-political considerations.

*The financial conditions*

The more immediate concern is when interest rates would normalise, as this would have implications for leverage, liquidity, spreads and asset prices. Real interest rates and risk premia are at uncharacteristically low levels. There appears to be a perception that the risks involved in various financing structures have diminished given a more benign macroeconomic environment. There is also a growing willingness of all investors to take on more risk in pursuit of higher returns. The higher risk appetite could be attributed to the search for higher returns, competition among lenders, and the 'originate and distribute' business model.

The combination of ample liquidity and higher risk appetites have driven the phenomenal growth in credit risk transfer instruments and leveraged buy-out activity. Investment banks, hedge funds, private equity and other institutional investors have been attracted to higher risk asset classes like collateralised debt obligations (CDOs) and synthetic CDOs (CDO of credit default swaps).

Leverage is a major concern when the cycle turns as credit markets reappraise risks and interest rates normalise. Liquidity and leverage are closely intertwined and they reinforce one another in a virtuous or vicious cycle. Under benign conditions with optimism, easy credit drives asset prices up. A shift in risk perception should lead to a rise in risk premia, which can trigger corporate defaults as credit conditions tighten, (that is where those credit conditions exist but the creation of "cov-lite" loans is another issue) and the unwinding of corporate leverage could reduce market liquidity and amplify the fall in asset prices. We have already begun to see some adjustments in the past two weeks, as I will elaborate shortly.

According to the Bank for International Settlements (BIS) in its Annual Report released in June, about a third of the CDOs are backed by asset-backed securities, and industry estimates suggest that a substantial share is backed by subprime and Alt-A mortgages. The BIS notes that the concern of investors is not so much the subprime market *per se*, but the effect that a continued deterioration of subprime would have on valuations of CDOs.

The valuation concern has now been borne out by the episode of the two hedge funds of Bear Stearns. In fact, as CDOs are not normally traded but held to maturity, there are no publicly quoted market prices. Portfolio holders or investment banks do their own valuation according to complex mathematical models and other non-market techniques. When creditors tried to auction the CDOs in an opaque and illiquid market, the salvage value was much lower than expected and creditors sold only a fraction of the assets. As a market commentator observed, such situation worsens the liquidity problems for CDOs beyond the underlying economics, in this case the subprime market.

Another area of concern is the huge amount of private equity leveraged buyouts (LBOs). Credit risks have risen as valuations of target companies have increased along with leverage, while credit discipline is weakening with light loan covenants. Bankers tell me that some private equity firms had told potential lenders not to bother unless they are prepared to do 'cov-lite' loans. Leverage of the acquired companies makes them vulnerable to shocks, and according to the BIS the average debt/cash flow ratio for companies acquired by private equity firms reached a record high of 5.4 in 2006. A collapse in a high-profile deal could leave banks exposed during the syndication stage and lead to a wider reappraisal of risks.

The advent of complex credit risk transfer instruments that can unbundle, atomise and transfer risks into tranches to suit the risk appetites of investors have increased both the ability and capacity of an economy to take on more risk. Asset prices have increased and, as the BIS noted, measures of short-term volatility have been unusually low across a broad spectrum of asset classes. Furthermore, markets recovered quite quickly following the two spikes in volatility in May-June 2006 and February-March 2007, pointing to the resilience of the financial markets.

Nevertheless, there are concerns that financial markets have yet to be tested under more stressful conditions. When the cycle turns, the resilience of the market would be dependent a large part on whether risks have been properly priced. The problem in the Bear Stearns episode is not so much valuation but leverage, - one of its hedge funds was geared up 10 times. It was the inability to meet margin calls that led to liquidations that put pressure on the valuation of the remaining collateral, leading to a vicious cycle of further losses and more margin calls.

We are also beginning to see the normalisation of interest rates. Policy interest rates have been raised or maintained in light of inflation concerns. The longer-end of the U.S Treasury yield curve has also begun to normalise with the recent sell-off in the bond markets. The subprime scare has pushed back easy lending, as reflected in the risk premium on 'cov-lite' loan that is reported to be increasing. Banks are reported to have refused to underwrite bond issues under proposed terms and demanded higher premiums of more investor protection. Last week, a few major bond issues were either shelved or postponed. This repricing of risks is healthy and a sign that the markets are managing their risks.

The changes in the financial landscape present three potential sources of vulnerability. One is the exposure of large banks to hedge funds that have been driving the liquidity of the credit and derivatives market. Another is the soft conditions on LBO financing. The final one is the reliance of hedge funds, private equity firms and banks on the credit risk transfer techniques to manage the risks. A shock in any corner could have knock on implications on the other two. For example, a turn in the credit cycle could impact hedge funds in meeting payments to banks and in selling credit protection. Similarly if either hedge funds or private equity firms that are active in the credit risk transfer market face difficulty, it could trigger a downturn in the credit cycle, if the 'originate and distribute' model is impaired.

### *The Challenges*

Risk management has come a long way. When I started in the business in London in the 1980s', we were at the end of the 3-6-3 approach to banking. Borrow at 3% - lend at 6% and go home at 3 in the afternoon, preferably after a long lunch. If the Bank Manager was worried about risk on a loan, he would call the borrower in for a chat, preferably before lunch. Nowadays, the credit transfer market means the risk is off the balance sheet before the ink is dry and repackaged, and sold out to multiple institutions.

The challenge to risk management is to understand "tail events" and evaluate their impact on stability. These are the low probability, extreme events that would bring the greatest stress to financial systems. Stress testing and scenario analysis in this regard are important. The publications of the IMF and the Bank of England, for example, in their assessment of the risks to financial stability, help to identify potential systemic weaknesses that could lead to crisis, so that action can be taken to mitigate these risks and avert the eruption of a systemic crisis.

Risk measurement and risk management by market participants play a critical role in contributing to financial stability. Risk management is more challenging in the current environment given : -

- (i) the complexity of financial instruments and trading strategies;
- (ii) the fact that illiquidity can magnify the risk of these instruments and strategies;  
and
- (iii) embedded leverage in these instruments and trading strategies compounds the difficulty in managing the risks.

## **Conclusion**

As you can appreciate, there is great complexity in financial markets, great challenges to risk management, and great uncertainty surrounding the unexpected shocks (tail risk). These challenges point to the need for more effective dialogue and cooperation internationally between and among regulators and market participants. In this regard, the various international efforts to set international best practices and standards, better regulation, dialogue with industry, as well as market initiatives on hedge funds and the management of counterparty risk are efforts in the right direction.

So “who’s watching the baby?” I would say that everybody who is engaged with the financial system is watching out for the risks. Financial institutions, investors, analysts, observers, market commentators, the media, the international financial institutions, central banks and regulators all share a common interest in the well-functioning of financial markets, the lifeblood of the economy. We all share a responsibility in exercising discipline to ensure that risks are not excessive. The information age has promoted a keen interest and awareness of global economic and financial developments. It has also increased transparency and governance and this has enhanced market discipline.

Forums like this conference are also important to the promotion of financial stability, the sharing of knowledge and views, are important for complete and well-functioning markets and the management of risk. I wish the Conference every success in bringing closer the realisation of the full potential for capital market development in Asia.