Mr Samson Chan, President  
Distinguished Members,  
Ladies and Gentlemen,

**Introduction**

1. It is a great pleasure for me to be here this evening on the occasion of the annual dinner celebration of the Toy Manufacturers’ Association. On sociable occasions like annual dinners, the difficulty is to pick a topic that would be of current interest to the audience.

2. The hot news this summer has been about the problems in the sub-prime mortgage market in the US that has jolted investor confidence and caused a sell-off in financial markets right around the world and a looming credit crunch.

3. As the turmoil is an important episode for financial markets and its effects are far reaching and the situation is still evolving, I would like to focus my remarks this evening on the origins of the crisis and how it is playing out. The subject is complex but not difficult. The challenge for me is to keep it simple and brief so that I do not lose your attention.

**Origins in the sub-prime mortgage market**

4. The best way to tell the “sub-prime” story is to look at the environment just before the crisis erupted. In recent years, the world has enjoyed stable growth, subdued inflation, strong corporate earnings and rising asset prices. The financial system had plenty of funds to lend and
interest rates were low. In such environment, investors were optimistic and perceived that risk had diminished. To earn a higher return, investors were willing to take on more risks and invest in more sophisticated financial products.

5. Now, let us see how the sub-prime mortgages fit into the search for higher returns by investors.

6. In the US, rising property prices had reduced the risk of default as the rising equity of a house would enable the borrower to refinance the mortgage in the event of payment difficulty. In addition, as interest rates were low, mortgages were more affordable. Mortgage lenders were therefore keen to push loans to a large pool of untapped house buyers whose credit standing was below that of prime borrowers. These are the sub-prime borrowers expected to be less likely to repay their mortgages in full. As sub-prime borrowers entered the housing market, house prices continued to climb, which in turn enabled more sub-prime borrowers to buy into the housing market.

7. The rapid growth of the sub-prime mortgage market was due to two key factors. One relates to the aggressive marketing by mortgage lenders and their brokers, as they were rewarded on the basis of volume of mortgages without having to face any consequences for subsequent defaults by borrowers. Consequently, lending standards were loose, documentation was poor or non-existent in some instances, borrowers were not given the full picture on what they were getting into, and there was also outright fraud such as mis-statement of income by borrowers, sometimes with the encouragement of the lender.

8. Another factor that fuelled the growth in the sub-prime mortgage market was the ease with which mortgage lenders were able to raise funds. They were able to fund such loans quite easily by selling the mortgages to investment banks that in turn issued securities collateralised by the mortgages. This is known as the securitisation process, whereby the loans are originated, sold and repackaged into mortgage-backed securities (MBS) which are bought up by investors around the world.

9. This is just the beginning of the life of the sub-prime mortgage. The sub-prime mortgage loans or their MBS are further repackaged into debt securities with different tranches of risk or credit rating, and return to meet the different risk appetites of investors. These debt securities are known as collateralised debt obligations or CDOs. The CDOs are sometimes repackaged into another CDO backed or collateralised by the earlier CDO, and this is known as CDO squared.
In search of higher yields in a low interest rate environment, financial institutions like investment banks, commercial banks, insurance companies, hedge funds, pension funds and other institutional investors were attracted to higher risk asset classes such as CDOs. Their risk appetite has been a major driving force that has fuelled the phenomenal growth of these markets and asset prices. Furthermore, low interest rates and easy credit conditions meant that hedge funds could borrow to leverage their investments in order to magnify returns. Of course, the flipside of leverage is to magnify losses when asset prices fall.

An interesting feature of the CDOs is that there are tranches with investment-grade rating, including AAA. This made the CDOs attractive to a wider universe of investors, including pension funds, mutual funds and insurance companies.

You might be wondering how such high rating is possible given that the underlying assets are sub-prime loans. Well, this is because the rating agencies used models based on historical data on loan repayments made in a period of soaring house prices. Naturally, the incidence of default was low. There has also been criticism of conflicts of interest on the part of rating agencies as they were being paid by the issuer of the CDOs, and rating of these instruments has been a substantial revenue source for rating agencies.

There are other complex structured financial instruments such as credit default swaps (CDS) and synthetic CDOs created in relation to the sub-prime loans. I shall not get into details, but I mention it just to illustrate how multiple layers of complex financial products have been created based on the sub-prime loans, and held by a variety of investors that have relied on ratings of the instruments. The result is a dispersion of the securities in financial markets to the extent that it is not clear who is ultimately holding the risk.

We can see that it was a combination of factors that has aided the world of structured finance to move the traditional housing mortgages from Main Street to Wall Street, from the banking system to capital markets, and from the US to investment portfolios around the world.

For a while, all went well and markets and investors were happy. Regulators, central banks and international financial institutions were concerned and cautioned markets and investors against the build-up in risks. But, the prevailing market confidence and optimism was not to be dimmed, as modern finance has helped disperse risk among investors and lowered the cost of capital, while asset prices continued to climb.
What happened then to change all this optimism and complacency into the sell off in global financial markets that we saw in August, the effects of which are still playing out now?

**Global market sell-off**

Signs that the good times were coming to an end started as early as the first quarter on 2006 when sub-prime delinquencies started to increase, followed by reports in the third quarter that the increase in house prices had begun to slow and housing sales had declined. The filing for bankruptcy by some sub-prime lenders hit the headlines in the first quarter of 2007. But it was not until July 2007 that Moody’s and S&P downgraded in a significant way many of the sub-prime asset-backed securities and related CDOs.

There were four main factors for the global market sell-off and I will discuss each in turn.

(i) **Risk reappraisal and credit crunch**

The downgrades in ratings triggered a reappraisal of risk by investors. In the initial confusion, it was not transparent to investors whether the funds that they had invested in had exposures to CDOs and the extent of such exposures. The uncertainty caused investors to panic, risk aversion to set in, a sell-off in financial markets and a looming credit crunch.

Several hedge funds that had borrowed to fund their investments in CDOs faced margin calls from banks to top up collateral and redemptions by investors. The problem with CDOs, unlike other more liquid bonds, is that they are not frequently traded. So sometimes there were even no quoted market prices when market conditions became uncertain. This time around, due to the great uncertainty and panic in the market, there were only sellers in a market which was opaque and illiquid. CDO holders, such as hedge funds, were unable to offload their positions unless they were willing to accept very depressed prices. In a sense there was almost a complete seizure of the market.

As a result, leveraged hedge funds that held CDOs had to suspend redemptions to stem further losses in a market where there were no buyers for the CDOs. Bear Stearns of the US was the first casualty, and the problem spread rapidly to other funds in the US and around the world that were also exposed to the sub-prime debt market. Australia was the next to be affected, followed by Germany, France and Canada, as funds and institutions owned up to their exposures and losses.
22. The crisis in the sub-prime market spread to a sell-off in other asset classes such as equities. Equities were badly hit as it was the only functioning and liquid market, as hedge funds and other traditional funds sold equities in order to raise cash to meet redemptions or meet margin calls. The stock markets around the globe fell further as investors feared the market situation would cause a slowdown in economic growth or possibly even a recession. The prices of commodities like gold and crude oil also tumbled.

23. The risk aversion spread to the asset-backed commercial paper market, as investors in these papers decided not to renew their holdings upon maturity of the commercial papers. Affiliates of banks in Europe and Asia had invested in CDOs funded by the short-term commercial papers which were held by institutional investors such as municipals in the US. As the commercial paper market dried up, the affiliates, known as conduits or structured investment vehicles, had to call on the back-up credit lines from their affiliated banks.

24. Investment banks that provided bridge loans to private equity also found themselves stuck with the loans, as the market for securities dried up. As the final extent of exposures of market participants to CDOs was unclear, and given that credit conditions remained tight, there was mistrust among banks in the inter-bank market. Banks chose not to lend and hoarded cash to meet their own future funding needs. Overall, banks’ aversion to risk increased and a credit crunch loomed.

25. Central banks around the world injected liquidity to keep interest rates at policy levels and to avert a credit crunch that could stall real economic activities. The Federal Reserve Bank lowered the Fed discount rate on 17 August by 50 basis points to reduce the cost of short term funds to banks, without affecting the general interest rate to borrowers. The Fed also relaxed some conditions on lending to ease the liquidity crunch in the inter-bank market. These moves appear to have calmed markets, but whether they are sufficient to restore market stability remains to be seen.

(ii) Unwinding of the Yen carry trade

26. Investors who relied on cheap Yen loans to invest in non-Yen high yield securities were squeezed by falling prices and a volatile Yen. Investors sold securities to repay their Yen loans, and the unwinding of the Yen carry trades reinforced the market decline and strengthened the Yen further. On 17 August 2007, the Yen made the largest gain against the US dollar in nine years.
(iii) Investor risk aversion and flight to quality

27. In such market turmoil, cash is king. Investor appetite for risk decreased and investors sought refuge in safe haven investments such as US government securities. Investors sold their stocks and other risky assets to stem further losses and build up their cash positions for future buying opportunities. Funds also had to liquidate their stocks to hoard cash in readiness for redemptions.

(iv) Losses of major quantitative funds

28. Goldman Sachs, the most prominent operator of computer-driven quantitative equity hedge funds, lost US$1.5 billion when its computer-driven model failed to predict market turbulence. The quantitative fund uses sophisticated computer models to spot opportunities to buy and sell securities, sometimes exploiting very small price differences. The funds then use leverage in order to amplify their potential returns.

29. During the turmoil, the shares began to move in ways that were the opposite of those predicted by computer models. One criticism of these models is that they were constructed using historical data where market conditions have been quite bullish and without excessive volatility. The unexpected moves triggered selling by the funds as they attempted to cover their losses and meet margin calls from banks. This in turn exacerbated the share price movements. This compounded the already nervous market sentiment and weak investor confidence.

Market watch

30. The above is the story as it has unfolded since July. You would be very much aware of the impact on Hong Kong. Volatility was much higher, as would be expected under such global market conditions. The market infrastructure and intermediaries coped well and continued to function.

31. The epicentre of the current crisis is in the US, affecting major markets with well-developed capital markets. While there was sell-off in Asia’s stock markets, due to the unwinding of positions by market players to cover their losses in the major markets, and there were some relatively small exposures to the CDO market, Asia has generally held up well in the current crisis.

32. In the aftermath of the Asian Financial Crisis, economies in the region have cleaned up their banking systems, strengthened the regulatory framework and financial infrastructure, and emerged from the recession,
building up strong foreign currency reserves on the back of good economic performance.

33. How the situation will play out remains to be seen. What we know is that the US sub-prime problem is much more deep-seated and structural in nature as discussed earlier, and the final losses have yet to emerge. The recent announcement of measures in the US to help housing loan borrowers keep their homes was a welcome relief but its effects on the housing market are uncertain at this stage.

34. Markets would continue to reappraise risks and volatility will continue for some time. Restoration of market confidence and stability would depend on the credibility and timeliness of actions of central banks, especially by the Fed. The role played by rating agencies would come under close scrutiny, especially whether conflicts of interests are manageable.

35. It would be interesting to watch the third quarter results of financial institutions and funds in the later part of this year to have a clearer assessment of the fallout.

36. A major concern is the impact on the prospects for economic growth in the US and the rest of the world if market confidence is not fully restored. The recent actions of central banks in major financial markets to minimise adverse impacts of setbacks in financial markets on the economy have helped calm the markets. Given the vital importance of the trading and finance sectors in the economy of Hong Kong, I believe many people of Hong Kong would be following events and developments with close interest.

37. During the sub-prime turmoil, the SFC maintained close contact with the Administration, HKEx as well as local and overseas regulatory authorities to monitor market movements and possible repercussions. Broadly speaking, securities firms in Hong Kong were not directly affected by the sub-prime market rout and related events. Neither were there any massive fund redemptions. It was because for most of the funds (including hedge funds) in Hong Kong, they rarely held financial instruments related to the US sub-prime market. Nevertheless, in view of the considerable uncertainties in the market, the SFC, as always, will remain vigilant in monitoring markets and supervising intermediaries.
Conclusion

38. Global markets are undergoing a stressful period. As previous episodes of stress and crisis have shown, the global financial system would emerge much stronger and resilient from the current shakeout.

39. Hong Kong has weathered many storms and has emerged much stronger. Hong Kong remains a great place for business; confidence is sound and the financial markets continue to flourish. Hong Kong’s position as an IFC would be enhanced with the opportunities that the further opening on the Mainland would bring, such as the expanded QDII and the “freewalk” schemes.

40. On this note, I thank you for your attention and wish you a pleasant evening.