

The Survival Rules in Recession

危機中的 生存之道

It was not too long ago when things were looking bright and bullish in the worldwide capital markets. There was no shortage of optimism and expectations were high. Milestones such as oil prices soaring to almost US\$150 per barrel, property markets worldwide growing rapidly, and stock prices setting record highs on a regular basis still remain vivid in our minds. A turn of events caused these milestones to come tumbling down. These include: the worst with the collapse of Bear Stearns and Lehman Brothers; the Federal Reserve's bailouts of Fannie Mae and Freddie Mac; AIG's plea for governmental fund injection and the global crash of stock markets worldwide. So what really went wrong? There are many commentators with differing answers, but most agree that the subprime meltdown in the United States was responsible for the current global financial crisis that is rippling across the world.

Roots of the Crisis

The story started well, only for it to descend into tragedy and folly. Low US government bond yields and a vibrant economy in the past few years had encouraged people with SIVAS (stated income, verified assets) and even NINAS (no income, no assets) to invest in real estate by refinancing with their appreciating houses. Financial institutions were eager to increase their market share in the subprime market to compete with their rivals.

By packaging the mortgages into collateralized debt obligations (CDOs), and diversifying the risk to investors. These structured products are designed with different tranches, and these tranches come with different maturity dates and risk/return profiles that made it highly popular for investors with different investment objectives. As such, financial institutions were setting record highs in profits as these structured products had enjoyed immense success. Despite knowing the risk involved with possible asset price depreciations, individual

在不久之前，世界資本市場牛氣沖天，呈現一片繁榮。油價攀升至每桶150美元，全球房地產市場高速地蓬勃發展，股票價格不斷創造新高。然而這一切都在一夜之間突然逆轉。投資銀行貝爾斯登公司及雷曼兄弟宣布破產，美國聯邦國民抵押貸款協會及美國聯邦住宅貸款抵押公司集體要求美國聯儲局救援，美國國際集團請求政府注資，全球股票指數翻滾而下…究竟發生了什麼事情？很多猜測評論紛紛出台，其中多數將金融危機歸咎於美國的次貸危機，指其引發了信用危機並淹沒了全球金融體系。

危機根源

故事有童話般美好的開始，但並未以完美結局落幕。在過去幾年，過低的美國政府債券回報息率以及過熱的經濟景況鼓勵了那些有收入及資產，或甚至沒有收入沒有資產的人都能置業並通過物業升值再融資，而金融機構亦熱切地在次貸市場中擴展著業務及增加市場佔有率。

金融機構將結構性產品風險分散然後轉嫁給投資者，不過，由於這些產品在投資者中廣受歡迎，金融機構的盈利亦因此而創出歷史新高。儘管相關資產價格下跌，投資者仍繼續投資於這些新興而透明度不高的產品，並認為這是一種穩定的投資。

and institutional investors were relentless in investing in these emerging exotic products and regarded them as a stable investment.

The housing price bubble reached its critical point and finally burst, resulting in the drastic depreciation of once highly valued property assets. Simultaneously, many subprime mortgagors began defaulting on their mortgage obligations, and creditors were forced to take possession of properties that were now worth only a fraction of its original value. Investors were surprised by their exposure to the high default risks embedded in the speculative CDO products, which were once assigned with top credit ratings by rating agencies. The values of these complex structured products, which are derived from the underlying mortgages, plummeted dramatically as mortgage default rates continued to skyrocket.

Financial institutions were now starting to realize their overly aggressive investment strategies would cost them dearly. For they had truly understood the looming risks involved in these complex and non-transparent structured products. Homeowners no longer enjoyed the benefits of the blooming housing prices and low borrowing rates. Conversely, expensive re-mortgaging costs and high borrowing yields put financial stress on individuals and corporations alike. It was obvious that economies worldwide were slowing down, and the credit crunch that had originated in the US has slowly rippled through the global capital markets like a drop in a barrel.

The Spread of Risks Continues in Hong Kong

Just months after the credit markets had started to contract, numerous listed companies in Hong Kong had issued profit warning due to the huge potential for losses resulting from equity structured products, as well as unauthorized forward trading that had resulted in the demise of well-established companies. A soaring stock market in the past two years has lured companies into participating in high-leverage equity structured products, with the sole purpose of betting on higher rewards during the good times. As the stock market lost momentum and headed southward, companies holding onto these structured products collectively suffered tremendous losses. In addition, they are also losing their investors' faith in their ability to manage their business and finances competently.

Fair value accounting has become highly controversial as a result of the financial crisis, and in response, changes have been made recently to two of the International Financial Reporting Standards: IAS 39 Financial Instruments – Recognition and Measurement, and IFRS 7 Financial Instruments – Disclosures. While some parties blame the mark-to-market accounting standard for the meltdown of the financial system, they fail to recognize that inadequate financial risk management and weak corporate governance are the main reasons why many businesses have collapsed.

Risk Management – the Effective Tools to Run a Business Risk Measurement

Risk management is a systematic process of making a realistic

房地產價格泡沫在達到最高點後終於爆破了，從而造成了房地產價格的急速下跌。投資者對於本來被評級機構評為高信用級別；但實情隱藏高違約風險的抵押債務都感到非常驚訝；因為這些複雜的結構性產品的價值開始隨著按揭貸款拖欠率激增而急速下跌。

一切問題漸明朗化，金融機構開始意識到他們對不透明及複雜的金融產品過份投資及其潛在風險缺乏了解。業主們不能再享受高物業價格以及低借貸利率。相反，昂貴的再抵押費用以及高借款利率令個人和公司財政受壓。經濟發展毫無疑問地將會放緩，信貸危機終於自美國如海嘯般波及了世界金融市場。

風險繼續在香港擴散

在信貸危機發生幾個月後，香港很多上市公司皆公佈了巨大的潛在虧損預警，虧損來自暴跌的股票市場中的股票掛鉤產品和牽涉未經授權的匯率期貨交易。過



去兩年可觀的股票市場回報吸引了很多公司以賭博般的心態參與了一些高槓桿股票及外匯掛鉤投資產品。很不幸地，投資市場最終回落，使擁有這些投資產品的公司遭受嚴重的損失。更深遠的問題是，這些公司面臨著投資者對其公司的管理能力以及財務穩定性的信心危機。

公允價值會計(Fair value accounting)在這場金融危機中成為了一個具爭議性的話題。為了迎合不同的環境狀況，國際會計準則中的兩項規則，即第39條(金融工具－確認和計量)，以及第7條(金融工具－披露)最近已被修定並於2008年7月通過。當公眾將金融體系崩

evaluation of the true level of risks to the business. In order to properly manage risk, a company must first identify exactly what type of risks they are exposed to. While companies aim to diversify risks and derive values from the performance of underlying assets by entering various OTC financial structured contracts or issuing financial instruments, they fail to acknowledge and identify the risks they are exposed to, as well as the potential financial impact they have. Holding onto any financial products means exposure to various risks, which includes: market risks; foreign exchanges and interest rates; credit and liquidity; and operational and financial reporting risk (see tables below). As a result, it is paramount that corporations fully assess and manage these potential risks before investing in any types of derivative products.

It is a common practice for a publicly listed corporation to finance their projects and operations by issuing redeemable convertible notes, but they often fail to manage the various risks inherent in such products. A convertible note is a debt instrument that can be converted into stock at the option of the holders at a predetermined conversion price. Since holders of the note have the added incentive of converting the convertible note into stock, the cost of borrowing is lower compared to borrowing directly from the market. To enhance its attractiveness, in some cases an additional term is embedded in the convertible note, which states the issuer will compensate the holder (with cash) whenever its stock price dips below a certain threshold. Although in many cases convertible notes are a cheaper and more convenient method to raise capital, corporations have often overlooked the risks involved: 1) Market risk: Pursuant to the additional term of the convertible note, the company is exposed to the risk of paying additional cash if the stock price declines; 2) Liquidity risk: The company may be required to repay its debt earlier upon the redemption request by the holder. 3) Financial reporting risk: Companies must recognize financial instruments to comply with IFRS 7, IAS 32 and 39. According to the classifications of the financial instruments under the International Accounting Standards, if the financial instrument is classified as Fair Value through Profit or Loss category, the fair value of the convertible note will be recognized in the profit and loss statement on each financial reporting date, which will cause earnings to fluctuate in the statement.

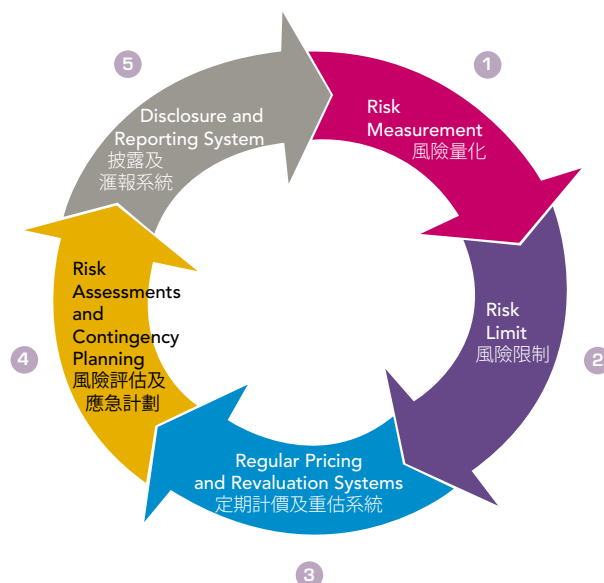
Risk Limit

Risk limit serves as a means to manage exposures to the various risks associated with derivative activities. Boards of directors should regularly review the performances and risks of all derivative activities. Regular assessments on the risks of derivative activities should be implemented to cope with the dynamic changes of market conditions. Prompt alerts and risk control actions should be taken when there is a broken limit, so as to prevent a financial position from deteriorating to a point where it is irreversible. Companies issuing convertible note can also limit the potential risks by assessing and adjusting the terms and conditions prior to issuance using quantitative methods measured by independent risk analysts. For example, a company may shield themselves from market

潰的原因歸咎於以市價計值會計準則的同時，他們沒有意識到不充分的金融風險管理和不妥善的公司治理體制才是導致很多企業倒閉的主要原因。

風險管理－運作企業的有效工具 風險量化

風險管理是一項對企業確實的風險水平作出實際評估的系統過程。在實行管理風險之前，公司應該先確認他們將會遇到的風險。當公司計劃各種場外金融合約或發行金融工具，而針對性地將風險分散或體現資產升值時，他們並未對公司要承受的潛在風險及財務上的承擔加以了解。任何金融產品都有機會承受各種不同的風險，當中包括市場風險、外匯及利率風險、信貸及現金週轉風險、營運風險及財務報告風險（詳見附錄一和二）。公司必須在投資衍生工具之前考慮並管理好這些潛在風險。



普遍的現象是：上市公司為某些項目進行融資時發行可贖回的可換股債券，不過最終有機會涉及各種風險，我們將會用此案例證明風險管理的重要性。可換股債券是一種可轉換為股權的債務工具，持有者在特定的轉換價格有權將債權轉為公司股份。正是由於持有者擁有將債券轉換為股權的權利，此債券借貸成本對於發行者而言應低於市場利率。為了提高可換股債券的吸引力，債券中有時會附加了一些條款，例如當公司股票價格降低至某個水平時，發行者將以現金補償給債券持有人。當公司認為發行可換股債券是將未來償還利息金額降至最低水平的最好方法時，有幾個潛在的風險是發行者必須考慮的：(1)市場風險：因可換股債券的附加條款，公司面臨著當股票下跌時必須償付額外現金的風險。(2)現金週轉風險：當持有者要求提前贖回債券時，公司需要現金以償還其債券。(3)財務報告風險：公司必須依據國際財務報告準則7以及國際會計準則32及39來

risk exposure by limiting the cash compensation to holder if the stock price declines, or limit its liquidity risk by granting the early redemption right to holder only after certain period of time.

Regular Pricing and Revaluation Systems

Due to their increased complexity, derivative activities must be closely monitored and controlled. Corporations would be wise to hire the services of independent quantitative analysts to provide reliable and accurate risk analysis and pricing reports to effectively manage their risk exposures. As part of the risk analysis, stress testing on adverse scenarios of the financial derivatives is required to provide a comprehensive picture on the position of the company. Additionally, mark-to-market valuation based on current market situations is also recommended for corporations.

As the primary stakeholders of a company, bankers and investors are always concerned with the financial health of the company. Therefore, it is common for bankers to request a valuation analysis on the convertible note issued in order to assess their credit risks, and this is especially true given the current crisis. With the regular pricing mechanism, the company can fully assess the market risk, liquidity risk and financial reporting risks they are exposed to before making relevant decisions regarding debt financing, and maintain sufficient cash under adverse conditions at the same time.

Risk Assessments and Contingency Planning

Sound corporate governance procedures should be in place and fully executed. The board of directors and senior management of a corporation should fully dedicate themselves in the adoption of the company's derivatives strategy and the review of all risks involved. Appropriate risk controls and contingency planning should also be conducted in light of potential misfortunes. In addition, meetings should be held regularly with risk analysts to make sure risks are properly monitored and controlled. When market risks increase and future earning capacity hampered, companies have to compensate investors with cash when the stock prices decline. They could redeem the note prematurely in pro-active effort to ease the pressure on cash flow and maintain investors' confidence.

Disclosure and Reporting System

To ensure the investors and stakeholders understand the potential risk exposures of the company, a risk management disclosure policy should be in place. Risk factors that could potentially affect the company's earnings or cash flow should be disclosed in such a policy. Quantitative and qualitative analysis for both on and off-balance sheet activities should also be analyzed by independent risk analysts. A comprehensive risk disclosure and presentation ensure companies to comply with compliance issue and also elevate corporate performance. Potential impact on the earning and cash flow derived from convertible note should be disclosed regularly and promptly to ensure corporations and their investors are on the same page.

Implementation of Risk Management Policy

Effective risk management policy is not only applicable to the companies which take part in derivative activities. It should also

confirm its financial tools. 根據國際會計準則中對金融工具分類的要求，如果金融工具在損益項目中被歸類為公允價值類別，那麼可換股債券的公允價值將於每個財務報告日期在損益表中反映出來，這意味著財務報表的盈利波動。

風險限制

風險限制是一種管理衍生工具的方法。董事會應定期審核所有衍生工具交易的表現及風險，衍生工具的風險應按市場波動而作出定期評估；當可承受風險的極限被突破時，應儘速作出預警和風險控制以避免情況繼續惡化。公司可以在發行可換股債券之前聘請獨立風險分析師作出風險量化評估及調整其條款內容，從而限制其潛在的風險。例如，公司可通過限制在股票下跌時對持有者的現金補償，以避免承受市場風險，或將持有者之提前贖回權限定於某段時間之後，以避免現金週轉風險。

定期計價及重估系統

由於衍生工具日漸複雜，適時的監管與控制變得必要。公司應聘請獨立合資格的分析師提供精確的風險分析及評估報告，作為有效地對風險管理的一部份。

進行金融衍生工具損失的壓力測試對於了解公司的整體狀況是必要的，而以市價計值(mark-to-market)作評估是我們推薦的方法。身為公司的主要權益方如銀行和投資者，對公司財務的健康狀況十分關注，他們應該要求公司發行的可轉換債券的評估分析師去評估其信貸風險，尤其是在當前這個信貸萎縮的市況。根據定期計價評估機制，公司在作借貸融資的相關決定前，可以全面了解其面對的市場風險、現金週轉風險以及財務報告風險，並可在不利的環境下保留足夠的現金。

風險評估及應急計劃

公司應建立並執行完善的公司治理程序。董事會和管理層應致力制定其運用金融衍生工具的策略和審查所有金融衍生工具的風險。公司亦需要實施相應的風險控制和應急計劃來避免或減少可能產生的損失。建議董事會和管理層定期與風險分析師溝通和制定應變措施，從而管理可換股債券的風險。公司發行有額外現金補償（為補償股票價值下跌的損失）的可換股債券會提高市場風險，會令投資者擔心公司未來的盈利能力，公司可能需要提前贖回這些可換股債券來緩解金融工具造成的現金流壓力，從而保障投資者的信心。

披露及匯報系統

為確保投資者及股東了解公司的潛在風險，公司必須制定一套完整的風險管理披露政策。對於影響公司收益或現金流的潛在風險因素，公司應該進行適當的披露。資產負債表和不入帳的資產負債表都需要由獨立的風險分析師對其數量和性質進行分析。全面的風險披露和解釋可以保障公司遵守相關準則並提高公司績效。關於可換股債券對收益及現金流的潛在影響，公司應定期披露，從而及時消除投資者的誤解。

provide a guideline for companies to maintain sound business operations. Failure to recognize the potential risks may leave corporations vulnerable to financial disasters, which has been evidenced by the recent business news headlines.

While the global economy has slowed down considerably, corporate profit expectations are expected to fall profoundly along with market demand and prices. Earnings will likely plunge to all time lows, which will restrict companies' ability to free up cash flow and repay their debts. The lack of liquidity in cash flow is pushing many businesses to their limits, with many of them on life support and on the brink of bankruptcy. To ride out the recession, what corporations can do is to implement an effective risk management policy and system to manage and steer their businesses back to the right direction in order to brace for future challenges. **M**

— Lisa Cheng

Head of Financial Risk Management

— Diana Chiu

Financial Risk Manager
GCA Professional Services



風險管理政策的實施

有效的風險管理政策不僅適用於涉及金融衍生工具的公司，也可以作為公司維持良好運作的指南。如果公司未能估計其潛在的風險，便可能成為我們在新聞頭條所看到的那些對金融危機失去抵抗能力的公司。目前全球經濟正步入衰退期，公司利潤預期會隨著需求和價格下降而減少。公司收益回落必然導致現金流入的減少，從而削弱了其償債能力。萎縮的借貸市場將威脅高負債公司的存亡。公司只有通過實施有效的風險管理政策及制度來經營業務才能渡過這個經濟衰退期並迎接未來的挑戰。 **M**

— 鄭寶頌

金融業風險管理總監

— 趙嘉欣

金融風險經理
GCA Professional Services

Appendix 1. Corporations are Exposed to Four Major Risks

附錄一。 公司面臨的風險主要有下列四類

Type of Risks 風險	Definitions 定義	Examples 例子
Market risk 市場風險	The day-to-day potential for an investor to experience losses from fluctuations in underlying asset prices 資產價格的波動有可能給投資者帶來損失	Loss due to market fluctuations of share prices, interest rates, exchange rates and commodity prices 由股票價格、利率、匯率和商品價格的市場波動造成的損失
Credit risk 信貸風險	Loss due to a debtor's non-payment of a loan or other line of credit (either the principal or interest (coupon) or both) 因債務人未能按時償還借款或其他信貸額度（本金、利息（票息）或兩者均未償還）而引致的損失	Default of the debtor 債務人的違約金
Operational risk 營運風險	Risk arising from execution of a company's business functions in daily operation 公司業務日常運作中產生的風險	Frauds, legal issues, loss of data and personnel problems 舞弊、法律問題、數據丟失及人事問題
Financial reporting risk 財務報告風險	Losses from adoption of an accounting rule 採納某種會計準則所造成的損失	Profit and loss impact and IPO risk 對損益表的影響/公司首次公開招股的风险

Appendix 2. Risks Inherited in Financial Instruments

附錄二。 金融工具的固有風險

Share Options 股票期權	Market and Financial Reporting Risk 市場風險和財務報告風險
Swaps/forward contracts 掉期/遠期合約	Market, foreign exchange, financial reporting and modeling risk 市場風險、匯率風險、財務報告風險和評估模型風險
Financial guarantee contracts 財務擔保合約	Credit and financial reporting risk 信貸風險和財務報告風險
Convertible bonds 可轉換債券	Market, liquidity, financial reporting and modeling risk 市場風險、現金週轉風險、財務報告風險和模型風險
Derivatives 金融衍生產品	Market, liquidity, financial reporting and modeling risk 市場風險、現金週轉風險、財務報告風險和模型風險