

Gain better protection over assets

One principle that stands is the need for quality diversifying of financial investments, say **FRANCIS KOH** and **KLAUS SPREMANN**

THE current financial crisis has diminished the assets of many investors, banks and industrial firms around the world. The assets of typical investment funds would have lost about half of their market value, and the creditworthiness of most firms have declined to abysmal levels. In the Singapore context, firms have been shoring up their equity bases to strengthen themselves pre-emptively.

Yet, commercial banks are generally not loosening credit. Liquidity, although urgently needed, has become scarce.

Financial losses and the lack of liquidity have been aggravated by the deterioration of real demand in the economy. Consumers have lost confidence. Purchasing firms have cancelled orders while suppliers are over-stocked with inventory.

Airlines, having lost passenger and cargo volumes, are cutting capacity to cope with half empty planes. Many firms have aborted their growth strategies and are hastily seen to be consolidating, downsizing or restructuring. Worrywarts foresee "second round effects" and prolonged recession, or worse, a depression.

The crisis of 2008 is deeper and more severe than many of the proceeding crises which do surface with regularity, happening every seven years or so. The current crisis has also affected more countries.

Why has this happened? To find an answer, one must look at the combination of three developments: the globalisation of investments; the use of leverage; and innovative financial products.

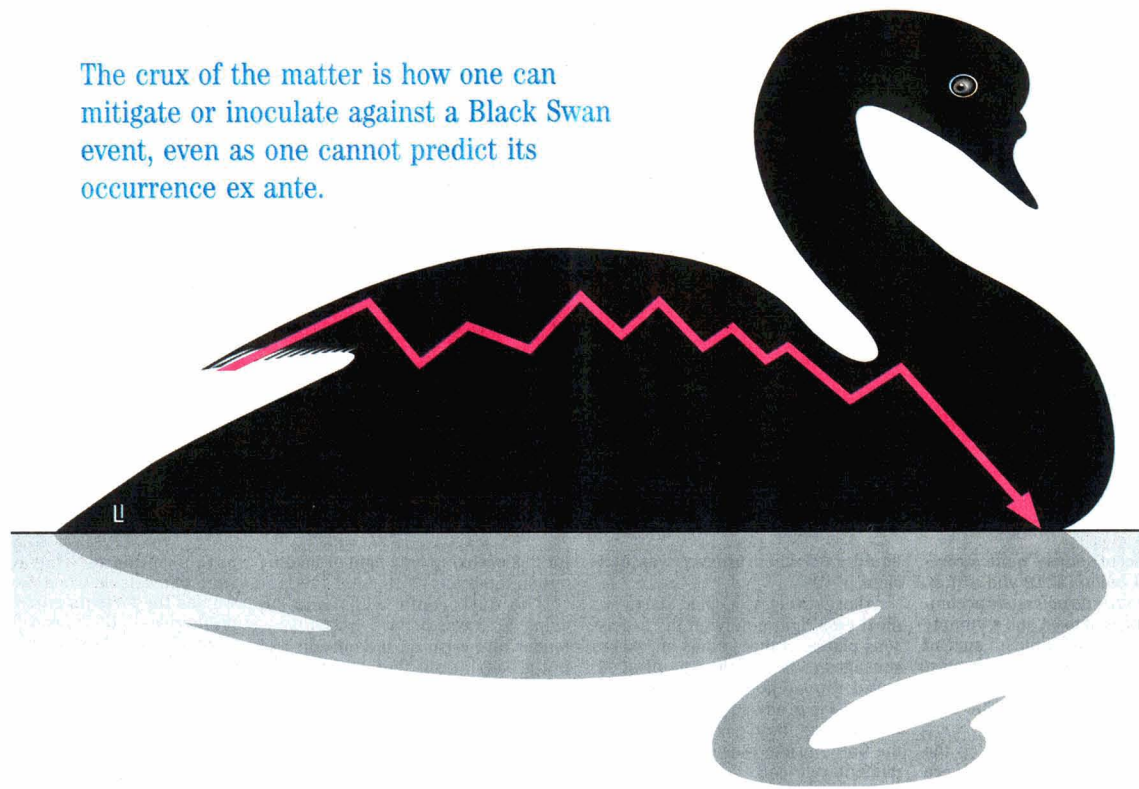
These developments have caused major financial markets to be so intertwined that "decoupling", which happened so often during past economic or financial shocks, was and will be no longer possible.

As segments of the financial market (which includes property, credit, commodity and equity) became more intertwined, they all moved in the same direction, upwards in the years of goldilocks and downwards in a crisis. Even the real economy (which consists of several industry sectors, technologies, physical products and countries), moved in tandem with the united financial markets.

The interconnection of the various segments within the world of finance was enhanced by innovative financial products, whose use has increased in the last five years. This growth has strengthened the linkages across global financial markets.

The stronger bonds that now exist be-

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tween financial and real economic activity is further enhanced by the use of extreme leverage, short positions and growth of hedge funds, which use global macroeconomic developments as investment opportunities.

Hedge funds, for example, exploit macro-market inefficiencies and these strategies exacerbate correlations and amplify market movements.

All these developments may be summarised as follows: the stronger the connections between various parts of the world economy make the global financial system more stable when volatility remains within its usual bounds.

However, the global financial system is threatened when volatility increases to extreme magnitudes. Small and more frequent disturbances have minimal impacts in normal cases. But rare and very heavy shocks can cause chaos to segments within both the real and the financial sides of the world eco-

nomy at the same time.

A statistician would call the 2008 financial crisis a 3-Sigma-Event to indicate that such a huge amplitude of a normally oscillating economy happens only once in a hundred years. To many, we might have encountered a "Black Swan" event.

Everyone may hypothesise that a bubble is building and will burst at some point, but nobody can predict when it will happen, nor would they compute the consequences, or impact of such a situation. When it has happened, as in the current financial crisis, we are wiser after the event and can explain it fairly well.

Crises emerge in random and unpredictable ways and the scale of these random events may vary.

Yet, the law of probability says that events with higher impacts are rare while smaller disturbances are more frequent. What this means is that management needs

to have better capabilities to weather extreme events.

The crux of the matter is how one can mitigate or inoculate against a Black Swan event, even as one cannot predict its occurrence *ex ante*, nor its dire consequences until it has happened. This falls into the area of risk management and/or damage control.

Management needs improved risk management perspectives. We suggest three critical imperatives:

◆ To implement adequate investment diversification and hedging

While investment diversification may not avoid losses entirely, it does mitigate against concentrated and/or unknown risks with possibly larger losses. Appropriate diversification cannot depend on historical co-variances which will not be effective in extreme situations.

Scenario planning and thorough stress

tests are needed. Further, diversification into investment assets with unknown risks, such as exotic structured products, the compositions of which are opaque, would only exacerbate risk.

◆ To increase organisational liquidity reserves

In order to have sufficient resources to weather contingencies or severe upsets, there must be sufficient reserves, as a fall-back. When extreme events happen, and markets collide, there is no buffer, except your own.

Banks and other financial houses will be too pre-occupied with short term problems to provide support and liquidity.

◆ Product-market diversification may be useful

The recent banking initiative in the US encourages "investment banks" to become involved in integrated commercial banking to avoid potential failure. This provides evidence that single industry businesses are more vulnerable than multi-industry firms.

One clear principle which appears in a new light is the need for quality diversification of financial investments. To allocate resources (and liabilities) over different regimes of uncertainty remains an important principle.

In normal circumstances, naive diversification based on historical correlations may work as long as segments of the financial market – property, fixed-income, credit risk, equity, currencies – revert to their historical properties. But naive diversification fails when extreme events occur, and historically uncorrelated assets move together.

To gain better protection in an abnormal situation, own reserves gain importance. However, reserves must be held in a way which is very close to money. Realising assets, such as commodities and structured products in extreme events are unreliable and difficult.

Hence, more research may be helpful to design new style portfolios which can mitigate against extreme events more reliably, and to find new styles of asset allocation which provide for the availability of liquidity even in an abnormal situation.

Francis Koh is a professor of finance practice at the Singapore Management University, while Klaus Spemann is a professor of Finance at the University of St Gallen in Switzerland