

SOCIETY OF ACTUARIES

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## A Depositor Run in Securities Markets:

#### The Korean Experience

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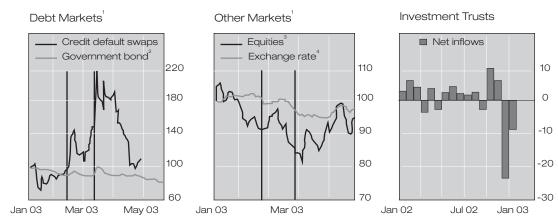
Comments from Thomas P. Edwalds, leader of EVM subgroup: The Extreme Value Models (EVM) subgroup of the Society of Actuaries Risk Management Task Force has compiled lists of events which could "never happen," at least according to common wisdom. But some of them did happen, and the others can not be ruled out scientifically. The EVM subgroup is currently sponsoring a contest to encourage actuaries to write discussions of approaches which could be taken to prevent financial ruin from this kind of risk exposure. This article provides an example of such an event that happened earlier this year: a "run on the bank" by investors trust funds in South Korea. The article also describes the actions the South Korean government took to prevent a complete economic meltdown in the wake of this event.

> hile financial systems dominated by banks are frequently contrasted with systems centred around securities markets, similarities between the two types of

system receive less attention. Events in Korean financial markets in March 2003 highlighted one of those similarities: the risks to financial stability posed by a run by investors. Central banks have long been concerned about the possibly systemic consequences of a sudden withdrawal of deposits from banks and have developed tools, such as deposit insurance and lender of last resort facilities, to respond to bank runs. Korea demonstrated that similar runs can occur in securities markets, in the form of mass redemptions of trust funds. The tools for responding to such runs, however, are much less developed.

The problems in Korea began on March 11, when state prosecutors indicted executives of SK Global, a subsidiary of Korea's third largest conglomerate SK Group, on charges of falsifying financial statements. SK Global was accused of inflating profits by 1.6 trillion won and hiding debt totalling 1.1 trillion won. Similar to the market reaction a month earlier-on 11 February when concerns about North Korea's nuclear weapons programmed had led Moody's to change its credit rating outlook on South Korea to negative from positive-equity, fixed income and currency markets all fell immediately after the indictment. However, whereas in February markets had stabilised quickly, in March liquidity problems among non-bank financial intermediaries led to a vicious circle of deterioration in market functioning.

In the days and weeks following the indictment, Korean investors fearing losses redeemed their holdings of investment trusts, especially money market funds. Redemptions in March totalled 24.7 trillion won, or 14 percent of trusts' assets at the end of



<sup>1</sup> January 1, 2003 = 100; vertical lines indicate February 11, 2003 and March 11, 2003.

<sup>2</sup> Five-year Korean won-denominated bond yield.

<sup>°</sup> KOSPI.

<sup>4</sup> U.S. dollar/won exchange rate; a decline indicates a depreciation of the won.

 $^{\scriptscriptstyle 5}$  Change in deposits with Korean investment trust management companies, in trillions of won.

Sources: Bank of Korea; Bloomberg; CreditTrade; Datastream; BIS calculations.

February. Given their limited cash holdings and restrictions on borrowing, investment trusts were forced to meet redemptions by selling assets. As a result, corporate and even government bond prices plummeted. Credit default swap (CDS) spreads on the Korean government also soared as liquidity in other segments of the debt market evaporated and investors turned to the CDS market to hedge their exposures. In the face of such distress selling, financing conditions in Korea's corporate bond market deteriorated to the point where the solvency of some financial institutions was threatened. Credit card companies were the worst affected because of their heavy reliance on investment trusts for funding. Rising delinquency rates had already begun to put upward pressure on card companies' borrowing costs, and as trusts liquidated their

assets, card companies faced the prospect of being unable to roll over maturing obligations.

The authorities eventually intervened to ensure that markets continued to function. In mid-March, the central bank helped to stabilise the government debt market by bidding for 2 trillion won, and the government postponed scheduled auctions of government bonds. To avert the possibly systemic consequences of a default by a card company, the Korean authorities brought together a number of key market participants to arrange an orderly refinancing of card companies' maturing debt. In early April, commercial banks agreed to provide a line of credit, and in exchange the card companies committed to raising 4.6 trillion won in equity capital.

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### Congratulations To New Section Council Members!

The following are newly-elected members of the Investment Section Council. They will each serve a three-year term beginning in October, 2003.

#### Sean Patrick Casey

*Lehman Brothers* New York, N.Y.

#### Martin K. le Roux

*ING Institutional Markets* Denver, Colo.

#### Stephen J. Stone Allstate Insurance Company Northbrook, III.

#### THANK YOU!

With appreciation to 2003-2003 outgoing council members:

**Douglas A. George** *Aon Consulting* Avon, Conn.

**Craig Fowler** *Maritime Life Assurance Company* Halifax, Nova Scotia

#### Charles L. Gilbert

*Tillinghast-Towers Perrin* Toronto, Ontario