

# DIMENSIONAL ASSET MANAGEMENT LTD

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We had planned to start an occasional series of short pieces expressing the opinion of various people in our organisation. The events of the last few days suggest that this may be a good time to launch it.

We would appreciate your comments.

Rolf Banz

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## THE "CRASH OF 1987" - FACT AND FICTION

"Wall Street losses twice as bad as 1929 crash" says the Times today. Also today, the Financial Times talks of a "bout of panic selling" as "both institutional and individual investors seemed to be willing to unload their whole portfolios". And we amateurs are firmly put in our place by the anonymous equity dealer quoted in the same FT who told us with the benefit of perfect hindsight that "the true professionals got out of the London market three weeks ago". Window ledges become a popular topic for editorial cartoonists. Financial journalists and other experts tell us on television why they had long been convinced that it had to happen.

But are the media right? Is this 1929 revisited? Or is the reporting just hype of the "man eats dog" variety? Let us look at some of the facts which have received little attention in the media.

1929 vs. 1987. Sixty years ago, the US markets were dominated by individual investors. Actually just a few of them as all US stock exchange member firms had a total of just 1.5 million client accounts (for a total population of some 120 million). Only 600,000 of them were margin accounts. These margin account clients who had to put up less than fifty percent of their own money were mostly speculators undoubtedly responsible for a large part of the volume on the exchanges. They were, of course, subject to margin calls on a downturn and if they did not put up additional funds, their position was sold. In essence, the market in 1929 was dominated by speculating individuals who were highly levered. By contrast, the market in 1987 is dominated by institutional investors. They are often accused of "short-termism" but the typical pension fund manager is quite aware of the fact that his investment horizon is measured in years and not quarters. The pension fund can afford to sit out events such as the current unpleasantness (actually as we will see later, it may not have much choice).

In 1929, daily volumes of 6 million shares or so were considered unmanageable for the back office. The market was, in essence, very illiquid. If a large number of investors wanted to sell at the same time, their orders might have never reached the specialist (who sets the prices on US markets). His prices might therefore not have reflected the actual demand/supply for shares. The resulting overhang of sell orders was partially responsible for the succession of days when the market moved (relatively) slowly but inexorably downward - with the predictable effect on "morale". In today's market, improved communications assure that orders are transmitted rapidly to the market place so that prices reflect the actual market demand and supply (remember that we are still talking about New York where there is a trading floor). In other words, the kind of rapid adjustment which we observed over the past few days is a desirable aspect of modern markets. Rapid adjustment to the "final" level assures that most prices paid are fair. We would have preferred not to experience the dramatic drop in share prices which occurred over the last few days, but if it had to happen, it was preferable that it happened rapidly. This is true regardless of what may happen tomorrow.

"Bout of panic selling". The image of everybody selling all their holdings in panic is irresistible to journalists. Reality is very different. On Monday, the NYSE's volume was just over 600 million shares. If we assume a (generous) average share price of \$40, the total market value of all shares traded was about \$24 billion. This is about 0.60% of the value of all NYSE stocks. In other words, less than one percent of all shares outstanding were traded - over 99% stayed on the sidelines, despite the headlines. For all practical purposes and despite the posturing of some, most investors' portfolios are the same today as they were last week (even if sadly worth less). Realistically, investors as a group had no choice. It is simply not possible to readjust everybody's portfolio on a massive scale.

The interesting thing which did happen. It would have been nice not to have participated fully in the recent events. Would "portfolio insurance" have been the answer? For those who hedged using actual instruments like put options, it probably worked well. But the "open interest" in those instruments is too small for the requirements of very large investors. They must construct "synthetic" puts which are maintained by adjusting the mix of cash and shares held. The principle is quite simple and is based on the option pricing framework developed by Black and Scholes. Their model assumes, however, that securities are traded in continuous markets. The experience at the beginning of the week suggests that this assumption may not always be met. If, say, the FT-SE index opens 135 points below the previous night's close, we would have wanted to adjust our share/cash mix all the way down but, naturally, we could not do that. As a result, the "insurance" may be much less effective than simulations based on continuous trading suggest if markets are subject to major fluctuations while they are closed.

What are the lessons? Given the current volatility of the equity markets, a buy-and-hold strategy looks more attractive than ever. Strategies which involve large turnover and require accurate timing of transactions for success may fail exactly at the wrong time. We believe that equities will outperform gilts over the next twenty years as they have done in the past (regardless of what happens tomorrow or next week). This leads us to recommend that the sensible course of action is to do nothing or even increase exposure to equities (if one believes in that sort of thing, most shares look much better on fundamentals now than they did last week...). The major losers will be those investors who have been and are selling and will most likely be fully liquid just in time for the next upswing.

Note: Information about 1929 is from J.K. Galbraith, The Great Crash 1929, an excellent study of the causes and consequences of the great crash.