

Pensions & Investments

The International Newspaper of Money Management

November 16, 1987

It's prone to failure

By Bruce I. Jacobs

The impotence of "portfolio insurance" in the face of the Oct. 19 market meltdown is prima facie evidence that insured strategies are prone to failure. Moreover, portfolio insurance destabilizes the markets and sows the seeds of its own destruction.

When the relationship between the spot and futures markets became unglued during the market crash, many insurers decided to stand on the sidelines. They chose to be unhedged in the face of the market descent, rather than to sell futures at what were perceived to be "fire sale" prices. Portfolio insurance failed precisely when it was most needed.

Meanwhile, recent limits placed on daily price swings on index futures cripple synthetic strategies. Suggestions of longer insurance horizons, while they may resolve the potential for failure and destabilization of the market, will provide lesser protection and create another opportunity for a crash.

The development of this industry in a few short years has been nothing less than phenomenal; recent estimates range as high as \$90 billion invested in insured strategies.

How did it expand so quickly?

It's rapid growth was due to the successful promotion of insured strategies as a panacea for a variety of ailments.

Actuaries stood ready to raise the return assumption for "insured" equities. Equity dedications, in lieu of debt, were promoted.

Superficially, the Financial Accounting Standards Board's Statement 87 seemed to be a reason to consider surplus "protection".

Some plan sponsors were tempted to lock up bull market gains, while others sought to buy "protected" equities to further increase returns.

Portfolio insurance was originally promoted as "free lunch."

Simulations highlighted periods of poor equity returns, in which the technique not only limited losses but also outperformed an uninsured approach. It was sometimes said that portfolio insurance is available for a negative premium. That is, an insured strategy could provide protection and also generate more wealth.

Because portfolio insurance is synthetically created, there is no explicit payment for premium. Rather, the cost of synthetic protection is imbedded in the strategy. This differs from publicly traded put options for which explicit payment is made. At best, portfolio insurance reduces risk at a fair - not a bargain - price.

Because portfolio insurance is merely responsive to market moves, it has no foresight. It can be shown the imbedded cost of protection equals the entire value-added provided by a seer with a crystal ball. Such a perfect market timer holds cash equivalents when stocks decline, but otherwise holds stocks.

An investor on the other side of the portfolio insurer's trades should expect to earn higher rewards than the insurance buyer, and even higher rewards than those provided by the constant mix policy (again, with the same standard deviation).

Some sponsors have decided to insure

their plan's surplus in light of FASB 87, which requires pension liabilities to be placed on the corporate balance sheet. Yet this standard has no direct impact on a firm's cash flows, and solely cosmetic effects on the balance sheet and income statement. If there are indirect effects on a firm's outstanding contracts specified in terms of reported numbers, these contracts could be negotiated.

Sponsors who have decided to lock in bull market gains may lock out future gains, because insurance strategies effectively reduce equity exposure. Is this not market timing in disguise?

Still others have insured stocks to have the comfort to increase their equity allocation. This sounds like reducing your profit margins, but hoping to make up the difference on volume. After all, insuring stocks reduces expected return.

Those facing shorter investment horizons might find insured strategies appealing, because a "safety net" may permit equity ownership. Also, insured equities might be sensible for pension plans of bankrupt companies that may not otherwise be able to afford the risk of loss.

In any case, the old and reliable remedy of diversifying risk appears to be the most prudent choice. Even if portfolio insurance implementations work, and expected returns can be increased by concentrating assets in insured equities, all bets would then be staked on one asset type.

Moreover, synthetic insurance strategies suffer from some rather glaring implementation pitfalls. Spikes in stock

prices or gap changes in sensitive parameters, such as changes in interest rate or stock market volatility, will cause synthetically created strategies to fail.

The strategy can "stop-out", requiring a full commitment to cash equivalents, to guarantee the promised level of protection. In this case, the investor will be shut out of subsequent rallies and may bear significant opportunity costs. The opportunity costs of the insured strategy, as measured by the loss of upside participation are comparable in both magnitude and frequency to the downside protection provided.

Still worse, however, the synthetic strategy is not fail-safe, and may miss the mark by a wide margin. This occurred Oct. 19, as the Dow Jones industrial average plummeted 508 points. That day's downward cascade provided insurers little opportunity for a graceful exit.

Some plan sponsors had half or less of the promised protection. Several sponsors have since suspended their insurance programs, others have canceled and even some insurance providers are considering withdrawing from the business.

Tragically, portfolio insurance exacerbates market movements and courts disaster. It does so by adding buying pressure as prices rise, and by contributing to selling pressures as prices fall. By destabilizing the marketplace it can bring on its own demise.

Portfolio insurers need trading partners who are willing to sell insurance and bear downside risk. If insurers enter the marketplace faster than their partners, the dance becomes one-sided and prices gyrate substantially. The cost of protection rises, the likelihood of being whipsawed increases and the chance of a steep market descent increases. In this environment, synthetic strategies are more likely to fail.

Whereas synthetic strategies can be implemented in either the underlying

spot markets, or using stock index future contracts, the latter approach has gained in popularity and has served to fuel the growth of the portfolio insurance industry.

The use of future contracts for hedging allegedly reduces what are otherwise substantial transaction costs in the spot market. However, because the prices of futures tend to lead the underlying spot markets, the insurer often buys dear and sells cheap.

Program traders arbitrage discrepancies between the spot and future markets, but spreads can get severely out of line. This happened Oct. 19 and 20, when the future discount to spot widened to as much as 20%. While "price discovery" in response to news does take place first in the more liquid futures market, portfolio insurance hedging aggravated the futures price. A further avalanche of sell orders by insurers was expected, and front-running (exploiting the insurers' known trading rules) made matters worse.

The chaotic market conditions inhibited program trading, which later was subject to temporary controls. There was little liquidity in the spot market: bid/ask spreads were exceptionally wide; bids were not firm; and trading was halted frequently because of order imbalances. Program trading was simply too risky in that environment and fell to less than half its normal level despite the unusually large spreads.

As the spot/futures relationship became unglued, many insurers decided to stand on the sidelines.

Oct. 20, salt was rubbed in the wounds, as insured assets were whipsawed. The market rebounded sharply, but upside participation was limited by the hedges that were now belatedly in place.

Apparently, those insured strategies having the option to sell stocks in lieu of futures emerged less bloodied. When the

management of the underlying assets and the insurance overlay is under one roof, hedging can be done in whichever market is most advantageous.

Recent limits placed on the daily price swings of index futures cripple synthetic strategies. Publicly traded put options might offer some relief from implementation pitfalls but such options are not available for long enough horizons, have a limited availability of strike prices, and suffer from their time-horizon dependency.

Furthermore, U.S. options, unlike their European counterparts, can be exercised at any time before expiration. This day-to-day protection is unnecessary for the portfolio insurer and would represent an additional cost.

Some might suggest longer insurance horizons, synthetically implemented, may resolve the potential for failure and the destabilizing influence on the marketplace, but this notion is without merit.

First, the effective insurance protection is merely reduced. Second, lengthening horizons just increases the market's capacity to accommodate insured assets, and if this capacity is strained once again, meltdown will be unavoidable.

Portfolio insurance was a bad idea whose time had come. In the wake of the debacle, however, it appears to be a bad idea whose time has gone. The explosive growth of the portfolio insurance industry has exhibited the characteristics of a fad, whose bubble has now burst.

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