Have You Insured Your Stocks

Many people think of options trading as very risky and suitable only for the "high rollers". In this article we will demonstrate one of the ways options can be used in conservative financial portfolios.
The basic definition of a put option is that it gives the owner the right, but not the obligation, to sell 100 shares of the underlying stock at the strike price anytime before expiration. If I buy 100 shares of Apple Computer (AAPL) at $136.50 or $13,650 and buy one contract of the Oct $135 put for $10.50 or $1050, I have a total investment of $14,700. This position is called a married put; we are long the stock and long the put (long means we own the stock or option; short means we have sold it and have an obligation to buy it back). If AAPL goes up in price, my stock will appreciate but my put will expire worthless. On the other hand, if AAPL decreases in price, my put will increase in value and make up for a portion of my loss on the stock price, i.e., the put acts as insurance for my stock.
A married put is analogous to your homeowners insurance; you paid $1000 at the beginning of the year for insurance to cover your home in case of damage from fire, storms and so on. At the end of the year, your home was not damaged and you lost the $1000 you paid for insurance. On the other hand, if a storm had caused $20,000 of damage to your home, the insurance company would have paid to have it repaired and you would be glad you had paid that $1000 bill for the insurance.
The married put is similar; if the stock price does nothing, our put expires worthless and we did not need our insurance. In this example with Apple, the insurance cost us $1050 (the cost of the put option). But if you are watching the evening news and see Steve Jobs being escorted from his office by FBI agents in handcuffs, you begin to worry. The next morning, APPL opens at $92, but we look at our account online and see a balance of $13,700 - we are only down $1000 or 7% when our stock has collapsed by over 30%; those may not be the exact prices, but you get the idea. Some of our stock price loss has been covered by the put.
Let's use our time machine and travel back to July, 2007. You own 100 shares of Google stock (GOOG) that you bought over a year ago, and have a nice gain in the stock. In June and July of 2007, GOOG was moving up strongly and was trading at about $548 on July 19th. You realize an earnings announcement is coming after the market closes and want to protect your gains, but still be able to take advantage of any gains that might occur after the announcement. To form a married put position with your 100 shares of GOOG, you buy the July $550 put for $14.20 or $1420. GOOG missed the market estimates for its earnings and the stock closed at $520 on July 20, a $2800 loss in one day on your stock position. But the put option you bought for $14.20 is now worth $30, so you gained $1580 on your put option, reducing the $2800 loss on the stock by over 56% to $1220.
However, buying puts on each stock would be rather tedious if I want to protect my entire stock portfolio. In that case, using index options that roughly match your portfolio is one answer. If my stocks are large companies in the Standard and Poors 500, then the OEX put options (the S&P 100) might be a good fit; the SPX options (S&P 500) represent a broad range of stocks, including many mid-sized companies. The NDX options (NASDAQ 100) would be a good choice for a high technology portfolio, since this index is made up of the largest 100 companies in the NASDAQ. The best portfolio insurance might be a mixture of SPX and NDX put options, proportioned in accordance with the stock holdings.
The essence of the married put strategy is buying insurance on your stock position. If the stock price drops, your gain on the put position offsets much of the loss on the stock. But if the stock trades up in price, you can enjoy all of that gain minus the cost of the put.
The married put strategy is conservative, but there is no free lunch in the markets (or anywhere else in a free society). Our downside protection, in the form of the put, costs us a small amount to establish. So, if our stock only moves up a little bit each month, we may only break even after paying for our put. But when the big crash comes, I may feel much more comfortable because my stocks are insured.