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Tao Pang* (tpang@ncsu.edu) and **Katherine Varga**. *Portfolio Optimization for Assets with Stochastic Dividends and Stochastic Volatility*.

We consider a portfolio optimization model in which the risky asset has stochastic volatility and also produces stochastic dividends. The goal is to choose the optimal investment and consumption controls to maximize the investor's expected total discounted HARA utility. We derive the Hamilton-Jacobi-Bellman equation using the dynamic programming principle, and then establish the existence of solution using the subsolution-supersolution method. Finally, we verify that our solution is equal to the value function, and derive and verify the optimal investment and consumption controls. (Received February 02, 2017)