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Discussion: Agricultural Commodities and Agribusiness Stocks as Financial Assets

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Nonfarm investors might benefit from diversifying their portfolios by investing in the agricultural sector. Such diversifying investments could include investments in agricultural stocks or long-only futures positions through index funds. The papers in this session investigate the diversification potential of agricultural investments and discuss the effects of investments in index funds on agricultural markets.

Key Words: commodities, diversification, futures markets, index funds, stock markets

JEL Classifications: G1, Q13

These papers look at the possible benefits and effects of investors trying to diversify their portfolios by investing in the agricultural sector. With fluctuations in the stock market and low interest rates, investors are looking for alternative places to put their money. Schnitkey and Kramer (2012) examine returns from owning agricultural-related stocks. Zapata, Detre, and Hanabuchi (2012) have two analyses: one that looks at cycles in commodity and stock prices over a long time period and one that looks at optimal portfolios over a very recent time period. Irwin and Sanders (2012) examine the likely effects of the influx of investment in commodity futures through index funds.

Zapata, Detre, and Hanabuchi

Zapata, Detre, and Hanabuchi (2012) address a question of much current interest, how good of an investment are commodities for a typical investor. Their first analysis suggests that commodity prices are negatively correlated with stock indices. Their second analysis shows that during a time period when stocks did poorly and commodity prices rose, investment in a commodity index would have been part of an optimal portfolio.

Much of the first analysis is spent on measuring long-term cycles in the ratio of commodity and stock prices. Even with a 140-year data period, a 31-year cycle will only be observed four and a half times. This makes for a small number of observations. No strong theoretical explanation is offered for the cycle and structural change over this time period has been substantial. While this is a fun thing to do, I am skeptical of attempting to trade based on this analysis.

Note that their Figure 1 shows that stocks have gone up at a rate 10 times that of commodities over the last 100 years. Holding commodities would typically have storage costs that are not included in the analysis. So, commodities are not a good investment for an investor with a long time horizon.

Their second analysis looks at a very short time period when stocks have done poorly and commodity prices have risen. It is not surprising that commodities are part of the optimal

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portfolio. Thus, commodities are a place to park money when stock returns are low. Note that this time period is not representative and a quarterly planning horizon is much shorter than that of most investors.

Schnitkey and Kramer

Schnitkey and Kramer (2012) examine the returns of agricultural stocks versus returns from the S&P 500 stock index during 2000–2011. Agricultural prices increased substantially over this time period and incomes of agricultural producers have gone up accordingly. They seek to determine if stocks of agricultural companies have also done well. They find that agricultural companies have performed better than the S&P 500. The better performance of agricultural stocks occurred before the main rise in agricultural prices. So this suggests either stock investors foresaw the rise in commodity prices or that the correlation between the prices of agricultural stocks and agricultural prices is even weaker than it first appears. They use time-tested methods so there is little to complain about in their procedures.

With an increase in demand for agricultural products such as corn for ethanol, we would expect returns to initially increase for all producing sectors. In a competitive market, the excess profits should be competed away and the returns should eventually go to holders of resources such as land or to specialized labor and management. To the extent that they control stocks of phosphorus and potassium, fertilizer firms are resource holders. Equipment and seed producers also hold some limited resources in the form of patents and seed varieties. Otherwise it is hard to see how agricultural firms would benefit that much unless markets are not competitive. That is what is found. Stocks of agricultural firms did well in this period, but probably not quite as well as investment in some other parts of the agricultural sector such as agricultural land.

Irwin and Sanders

Irwin and Sanders (2012) document some of the changes that have occurred in futures markets during the last few years. There has been an explosion in volume and open interest. Most trading has switched to electronic platforms rather than open outcry. The portion of small traders has shrunk.

A major focus of their study is index funds. Index funds include a variety of investment vehicles that use a buy and hold strategy in commodity futures markets. Zapata, Detre, and Hanabuchi (2012) argued that if investors have a short planning horizon, then an investment in commodities can belong in an optimal investment portfolio. Firms have been successful in marketing these investments. A major policy question is how has the growth of index funds influenced the commodity markets?

Since 2006, as Irwin and Sanders (2012) show, index fund investment has been a relatively constant percent of the market. It is indeed difficult to see how index funds could have been responsible for a price bubble in commodity markets. Their position in earlier papers, such as Irwin and Sanders (2011), was that index funds had no effect at all. I am glad that they have moderated their position slightly. They now mention that index funds could have reduced risk premiums paid by short hedgers and in some cases could even cause risk premiums to be paid to short hedgers. They also discuss the possibility of index funds increasing the demand for storage. Most would consider these two effects to be positive (although an increase in demand for storage could increase price levels in the short run). Thus the policy implication is that there does not seem to be a reason to limit investment in index funds. Irwin and Sanders (2012) do not discuss managed funds, which take both long and short speculative positions. Managed funds often use trend following trading systems and therefore managed funds could help cause a price bubble.

Summary

The three papers in this session are related in that they all address the general issue of investors in financial markets using the agricultural sector to diversify their portfolios and thus reduce risk. Schnitkey and Kramer (2012)

find that investing in agricultural stocks has modest diversification potential. Zapata, Detre, and Hanabuchi (2012) argue that investment in commodities themselves has strong diversification potential. While the risk reduction appears to be present, expected returns from commodities are low and thus investment in commodities would appeal more to a short-sighted investor. Investment vehicles that provide the ability to invest in commodities by taking buy and hold positions in commodity futures markets have been created and investment in them is substantial. Irwin and Sanders (2012) review the literature on possible effects of this investment. Their review and analysis suggest that this investment should not be a cause of concern for the agricultural sector.

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