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Agriculture Sector

Product Group Expansion

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Current State of the Agriculture Product Group

The Penn State Asset Management Group Agriculture Sector currently trades wheat, corn, soybeans, live cattle, and lean hog. All five of the commodities traded are based solely on the U.S. product. In the crops portion of the product group, all three commodities are grains produced heavily in the Midwest and range over to the Mid-Atlantic region with little production in the southern half of the U.S. They are all heavily weather dependent on the supply-side and are all used heavily as feed products in agriculture. As a result, the three products tend to be highly correlated, especially since the trade war, as shown in Figure 1 to the right. It is shown that the prices of the grains are closely correlated, with only occasional discrepancies in the relative price movement such as much lower-than-expected corn production in the summer of 2019. As for the sector's livestock products, a close correlation in relative price movement is not seen, as shown in Figure 2 to the right.



Action to Take

The correlation of three of the sector's products along with the relatively low total of five products leave the sector at a disadvantage in trading profitably. After understanding the correlation of the three grain products, the sector concluded that there are only about three different ways to apply macroeconomic and agricultural factors to a trade when one is being made. This has led the sector to look for ways to expand the product group to increase exposure to other parts of the agricultural world. The sector proposes that the following products are added to the Agriculture Sector's product group: coffee, cocoa, sugar, and cotton. The sector also investigated adding feeder cattle to increase livestock exposure, but volume on feeder cattle futures and futures options is low enough to worry the sector about liquidity issues when trading the product.

Cotton (CT1)

The sector would like to add U.S. cotton to the product group. Although it is another U.S. crop, it is very different from the three current grain products in the group. Cotton is grown in the southern half of the U.S., most heavily in the southeastern states and Texas. It also is not affected by weather as severely as corn, soybeans, and wheat; and it is able to withstand both hotter and drier climates. The product is traded on is the Intercontinental Exchange (ICE), so trading hours include Sunday until Friday from 9:00 P.M. until 2:20 P.M. Prices are quoted in cents/pound, and futures expiration months include Mar, May, July, October, and December for the next 24.00 months.

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Cocoa (CC1)

The sector would like to add cocoa to the product group. Cocoa is the first of three international agriculture products the sector would like to add to gain exposure outside of the U.S. The contract is based on cocoa produced from several countries. Sierra Leone, Ghana, Ivory Coast, and Nigeria are the four heaviest weighted group of countries in the futures price; a mix of African and South American countries make up the second heaviest weighted group, and a mix of South American and Asian countries are the lowest weighted group. The product is traded on is the Intercontinental Exchange (ICE), and trading hours include Sunday until Friday from 4:45 A.M. until 1:30 P.M. Prices are quoted in USD/MT, and futures expiration months include Mar, May, July, September, and December for the next 23.00 months.

Coffee (KC1)

The sector would like to add coffee to the product group. Coffee is the second of three international agriculture products the sector would like to add to gain exposure outside of the U.S. The contract is based on coffee produced from several countries. Deliverable origins include Mexico, Salvador, Guatemala, Costa Rica, Nicaragua, Kenya, Papua New Guinea, Panama, Tanzania, Uganda, Honduras, and Peru all at par. Colombia is at a 400.00 point premium; Burundi, Rwanda, Venezuela and India at 100.00 point discount, Dominican Republic and Ecuador at 400.00 point discount, and Brazil at 600.00 point discount. The product is traded on is the Intercontinental Exchange (ICE), and trading hours include Sunday until Friday from 4:15 A.M. until 1:30 P.M. Prices are quoted in cents/pound, and futures expiration months include Mar, May, July, September, and December for the next 23 months.

Sugar No. 11 (SB1)

The sector would like to add the world benchmark for raw sugar to the product group. Raw sugar is the last of the three international agriculture products the sector would like to add to gain exposure outside of the U.S. The contract is based on raw sugar produced from several countries. Deliverable origins include Argentina, Australia, Barbados, Belize, Brazil, Colombia, Costa Rica, Dominican Republic, El Salvador, Ecuador, Fiji Islands, Guatemala, Honduras, India, Jamaica, Malawi, Mauritius, Mexico, Mozambique, Nicaragua, Peru, Republic of the Philippines, South Africa, Swaziland, Taiwan, Thailand, Trinidad, U.S., and Zimbabwe. The product is traded on is the Intercontinental Exchange (ICE), and trading hours include Sunday until Friday from 3:30 A.M. until 1:00 P.M. Prices are quoted in cents/pound, and futures expiration months include Mar, May, July, and October for the next 24.00 months.

Conclusion

The sector hopes that serious consideration will be taken in making the decision on whether to add these four products, the sector has very high confidence in the added profitability this action will give to the sector. It will take some time to get acclimated to the products and learn how they trade, so the sector will not be trading them for at least the next couple of weeks. Once acclimated, it is believed these products will give us more possible avenues to take when pitching trades to the club or writing sector briefings. This action will benefit the sector not just this semester, but for all its remaining time in PSAMG.

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