Identify the main forms of manipulation that occur in futures markets. Illustrate your answer with reference to one incident of alleged manipulation. What, if any, regulation should be imposed to deter the manipulation of futures markets?

Registration Number: 1504038

Introduction

Ever since there were opportunities to profit from trading in futures markets, there has always been the incentive to take advantage of "unfair" methods to profit further. This paper looks into some of these "unfair" methods to obtain more profit, an example of when these methods were carried out and possible solutions to prevent such events from occurring again.

Manipulation in futures markets

There are many ways an economist can define what it means to manipulate a market, hence giving a concise definition can be tough. Usually we are looking for "unfair" practices, however, in the case of future markets, we must look at the particular type of conduct by traders to help narrow our definition. Pirrong (1995) defines such manipulation in futures markets as "the exercise of monopoly power as a futures contract nears expiration, commonly termed a "squeeze" or a "corner". In essence, what Pirrong is trying to emphasise, is that traders are attempting to gain monopoly power through methods I will mention later, effectively becoming price-makers in the market, and in the classic sense of monopolies, can acquire a significant share of the market surplus by influencing the market price. Several types of manipulation can be found in futures markets. These could be carried out in a number of combinations, or independently.

"Cornering the market" is perhaps the most popular form of futures manipulation. In this method, the manipulator must first purchase a large stake in futures contracts for delivery on a given date, while also purchasing large amounts of the underlying asset. "The anonymity of futures contracts implies that these trades can often be undertaken without other traders being aware that anyone investor has taken such actions" (Bailey, 2005). This underlying nature of futures contracts is what allows this form of manipulation to take place. As the delivery date closes in, the investors with short positions, who seek to purchase contracts to offset their obligations to deliver the underlying asset, are shocked when the manipulator refuses to sell and stands for delivery. Meanwhile, having acquired most of the deliverable asset available, the investors are left in a predicament. They can either purchase the underlying asset at the manipulators' terms to settle the contract; or purchase futures contract at a premium to offset their position, or default and face legal consequences. The result of this is a rapid temporary price rise in the futures prices for that delivery market. "Squeeze the market" is another form of futures manipulation. It is quite similar to cornering the market, wherein the manipulator would have a significant stake in outstanding futures contracts, but in this case, they would not own the underlying asset itself. The futures prices may rise in this situation, but likely less than would be expected during a corner.

In addition to "corners" and "squeezes", Williams (1995) highlights three other possible forms of manipulation.

Firstly, a "rumour" manipulation. It requires a reputable trader either in the futures or underlying commodity, to spread false information of a potential shortage of the underlying asset that will occur in the future. The "rumour" needs only to be presumed true until the trader can close his position at the now increased prices.

Secondly, an "investor-interest" manipulation. Numerous trades and positive statements by one trader, creates a sense of "fear of missing out" in other traders, thus incentivising the purchase and holding of the asset. As the price rises, the manipulator can sell its holdings at the higher price until the other investors realise the interest in the asset is temporary; thus the price decreases back to market clearing levels.

Third, a "price-effect" manipulation. In this instance, the trader who holds an opinion about the long-term value of an asset, either buys or sells the asset in such quantities that influence the current price, knowing that the intended effect on the price will follow.

In summary, manipulation is considered "improper", and provides an unfair advantage to the manipulator who assumes monopoly power in the market. It also weakens market mechanisms, as Easterbrook (1986) describes "The adjustment for the risk of manipulation drives a wedge between the futures price and the anticipated price of the cash commodity". This mechanism which usually compensates the traders for the risk involved in participating in a futures market, becomes less effective as now the price is artificially fluctuating, which also in turn, reduces the effectiveness of hedging with futures contracts, as now some risk of price change must still be borne by the hedger. Trade is also discouraged, because if traders are aware that they would be entering into a futures contract that would lead to their costs exceeding their benefit, they will stop dealing in that market; as participation in the market is voluntary, leading to a reduction in liquidity.

A point to discuss is, does the manipulator even profit from manipulating? By using a corner or squeeze techniques, the trader may successfully artificially increase the price. Now to realise these profits, requires the asset to be sold, which in turn, causes prices to fall. Consequently, the trader may not obtain high levels of profit, as the asset was being purchased at increasing prices while being sold at decreasing prices. This effect is known as "burying-the-body" (Pirrong, 1995). Bailey (2005) adds to this, saying short-

traders should not be "naïve" in overlooking the chance of a corner or squeeze occurring in a market, and not sell till the price is high enough to counteract such manipulation.

The inherent problem with manipulation is that it is difficult to prove. Williams (1995) states that "All manipulation cases concentrate upon circumstantial evidence". For example, if the price for delivery were judged to be abnormal compared to future delivery dates, then it was thought that manipulation has occurred.

One incident of alleged manipulation

One of the most famous instances of futures market manipulation was known as The Hunt silver case. During mid-1979, silver was trading between \$8-\$9 per troy ounce, which was a record high at the time. The morning of 21st January 1980, saw it peak at \$50 per troy ounce. Its sharp increase was mirrored in its sharp decrease, and by 27th March, the price of silver collapsed to \$10 per troy ounce.

Two reasons were given for the spike in price. One, global political and economic issues lead to a rush to a safe haven of value, precious metals. Second, the Hunt brothers with other conspirators, manipulated the market.

The Hunt brother employed several market manipulation strategies as discussed previously.

The Hunts told others to invest into silver, following the "investor-interest" manipulation. However, as Williams (1995, pg. 118) points out, there was a lack of evidence to corroborate such claims.

At the time, the Hunt brothers, N. Bunker and W. Herbert Hunt and other conspirators, controlled over 250 million troy ounces, which was equivalent to global production in silver for a year. Bunker Hunt alone had over 12,000 contracts for delivery in March 1980, and at the peak during 21st January 1980, their profits surpassed \$5 billion. As most of these profits were spent taking delivery of silver coin and bullion across the world, they were short of liquid cash, as soon as the price of silver began to crash. By the end of March, the Hunts remaining positions were liquidated leading to the losses of hundreds of millions, possibly billions on their silver holdings.

This is when it went all downhill for the Hunts, as they were forced to take out loans backed against their family holdings to consolidate their silver debts. Lawsuits started being opened against them for market manipulation. The most famous being a Peruvian metal marketing company called Minpeco, which had sustained heavy losses in the futures market during the Hunts cornering of the market. The jury found the Hunts guilty on multiple charges, and awarded \$132 million in damages to Minpeco. Tax disputes with the Internal Revenue Service, forced the Hunt brothers into bankruptcy.

Regulation in futures markets

With regard to regulation, be careful to reflect explicitly in your paper on the objectives that regulation may seek to fulfil and the ways in which the regulation has, and could be, implemented, being careful to assess the merits (or otherwise) of the regulatory measures. This is how you will demonstrate your understanding, and thus reach a high standard of work.

There are three approaches towards regulations that can be applied in futures markets:

1. <u>Ex Ante Regulation</u>

The first approach is to use ex-ante¹ regulations. This is where we predict possible manipulation to occur in a market and place measures to stop it. Under ex-ante regulations, there are two possible strategies to impose. One, by creating administrative rules to oversee futures contracts market, and two, to restrict the creation of futures contract until potential manipulation can be ruled out by a regulator.

Under the first possible strategy, exchanges are required to create specific precautions that reduce the opportunities for manipulation to occur, through methods such as position limits to cap the amount an investor can hold in a futures contract, and stringent reporting techniques. Exchanges can offer future contracts freely at this point. An agency would evaluate the requirements created by the exchange and can force it to

¹ Ex ante is latin for "before the event"

improve them if they are deemed inadequate. The agency will not need to intervene if the market is functioning well without stringent precautions. This strategy is dependent mainly on exchanges' self-interest to identify and enforce precautions upon the market participants. A similar strategy is used today in securities markets, as anyone can offer a new security without attaining the permission of an agency (for example, the U.S. Securities and Exchange Commission); however, it requires details on the security and for the exchange to enforce specific requirements. Such systems of regulation has assumptions such as traders being given free will to decide as they choose in purchases.

Under the second strategy, exchanges would need to demonstrate that the creation of futures contracts would not be susceptible to manipulation and in the public interest. The Commodity Futures Trading Commission Act of 1974 is an example of such regulation placed on future markets. This strategy requires the exchange to certify each contract, thus placing a substantial burden on exchanges to analyse and identify issues in contracts, and not agencies. Vetting and restricting the creation of each contract can, therefore, be most effective in preventing monopolisation; if there is no market, there can be no monopoly, but this carries the highest costs.

However, ex-ante regulation is undesirable for many reasons. Firstly, the high cost of regulating exchanges are even costlier as regulators may instruct exchanges to enforce stricter precautions. Secondly, implementing regulations such as position limits requires perfect information on numerous factors that can encourage manipulation, which is usually not available. These restrictions, therefore, are indiscriminate and affect even

legitimate traders; reducing the value of hedging and liquidity in the market. Such regulation is doubtful to have benefits unless regulators can outperform exchanges inefficient precautionary measures.

2. Ex Post Regulation

Secondly, there are ex post² regulations. This is where we would look at the manipulation after it has occurred and apply punishments accordingly. The main strategy here would be to deter monopolistic or manipulative behaviour through harmbased sanctions.

Under this regulation, exchanges would offer futures contracts freely and take precautions under their prerogative. Then, if manipulation or monopolistic practices occur in the market, the agency or the courts can seek punishments against the conspirators using anti-trust laws. The most comprehensive regulation in use today includes deterrence of improper conduct and has been the most common method of regulation in future markets for most of history. Pirrong (1995) reasons that ex-post regulation is, therefore, less costly compared to ex-ante, as there are less bureaucratic regulations distorting markets. Also, potential manipulators may be discouraged to manipulate as the risk of being caught and punished may outweigh any monetary benefits.

² Ex post is latin for "after the event"

Ex-post regulation does not run into the same issues that ex-ante does. The cost of expost regulation is much less than ex-ante, as money needs only to be spent to punish the manipulators, and not to proactively monitor markets. Moreover, the very nature of manipulation is advantageous for regulations which deter through punishment. As Easterbrook (1985) argues, as manipulative effects on prices and quantities are readily observed, the probability the manipulation is detected is very high, and the chance of mistaking blame and thus punishment is minimal. Usually, manipulators tend to be wellinformed, with large sums of financial assets; this provides a burden of proof to courts that the manipulators knew what they were doing, and they would be able to pay any sizable financial punishment the state imposes on them for their manipulation. Shavell (1993) argues because of these conditions; ex-post regulations are more efficient than ex-ante.

3. Self-Regulation

One last approach is to leave the market be, and let self-regulation of the market occur. Self-regulating exchanges take first-best precautions; which is not imposing restrictions or regulation will allow efficiencies to occur naturally. As such, these exchanges internalise all of the costs and benefits to deter manipulation, and can therefore intervene during instances of manipulation at much lower costs than other regulatory methods. Therefore, exchanges that are not under regulatory agency eyes, can efficiently adopt and enforce restrictions on manipulative behaviour. Overall, it is believed that exchanges will take comprehensive action to prevent corners and squeezes. However, this method of regulation is based on the theory that the exchange will internalise all the cost and benefits is very optimistic.

Conclusion

To conclude, we have identified several different methods of manipulation that investors have at their disposal, such as the classic "corner" or "squeeze" and other such as "investor-interest" and so on. We then saw how these methods of manipulation were applied to a real-world scenario with the Hunt brothers, and then analysed possible regulatory practices that could be adopted to stop such events from occurring again. The holistic that this paper can gather is that different markets require differing amounts of regulation to ideally be protected from manipulation, but ex-post deterrence is the most cost-effective for agencies and members of the market, as little government interference can do more harm than good.

Bibliography

Bailey, R.E., 2005. The economics of financial markets. Cambridge University Press.

Easterbrook, F.H., 1986. Monopoly, manipulation, and the regulation of futures markets. *Journal of Business*, pp.S103-S127.

Pirrong, S.C., 1995. The self-regulation of commodity exchanges: the case of market manipulation. *The Journal of Law and Economics*, *38*(1), pp.141-206.

Shavell, S., 1993. The optimal structure of law enforcement. *The Journal of Law and Economics*, *36*(1, Part 2), pp.255-287.

Williams, J., 1995. *Manipulation on trial: Economic analysis and the Hunt silver case*. Cambridge University Press.