

CHAPTER V : TERMINAL MARKET PROCEDURES AND PRICE STABILITY

1. INTRODUCTION

The preceding chapters of this study indicate that it is no straightforward matter to assess the influence of terminal markets on the price stability of commodities. As long as terminal markets reflect the true balance of supply and demand in the physical market (together with implied judgements of the future balance), then a shift in the real market will elicit a response from the quotations on the terminal market.

In the event of such a change in circumstances, it is difficult to judge whether the terminal market 'over-reacts' and exacerbates instability. However, we saw in Chapter IV that speculation, on the part of trade and non-trade interests, is an integral aspect of terminal market business. In this chapter, we will examine whether the rules and operating procedures of terminal markets are such that the speculation necessary for market liquidity is potentially destabilising.

A strong a priori reason for suspecting that the procedures of terminal markets are potentially destabilising is the manner in which they serve to emphasise the markets' financial and 'paper' character. Although terminal markets are ultimately based on the useful properties of the commodities they deal in, it is possible to trade commodity contracts purely on the basis of expectations about movements in the price. Indeed, this is the whole *raison d'etre* of terminal markets - to enable one to cope with the problem of price fluctuations. The more sophisticated the market, the further removed from the world of the physical commodity become the operations possible. Viewed as a store of value, the commodity becomes merely one possible form of holding wealth, in the short-term or long-term, alongside equities, foreign currency, gold and other assets.

For this reason, problems in other markets, having little or nothing to do with that of the commodity concerned, can have an important effect on its price. Chapter IV indicated how, in the case of copper, fluctuations in terminal market trading on the LME were related to exchange rate instability. In general it is difficult to unravel the impact of the many and varied influences on a particular market. However, the example given in Section 3, below, provides a strikingly vivid and topical illustration of the way in which terminal market operating procedures can accentuate the degree of price volatility experienced by a particular commodity. But, before doing so, it is useful, first, to identify the most important procedures that may affect trading in commodity futures.

2. TERMINAL MARKET TRADING RULES AND PROCEDURES

There are many rules and procedures for trading on terminal markets, covering all aspects of conducting business. These include, not only the fixed times for official trading during which the exchanges prices are set, nor merely the quality specifications for an eligible commodity. Other aspects that are regulated include limits on the amount by which prices can rise or fall during a single trading session; for example, on the New York Cocoa Exchange the price of futures contracts can move by six cents per lb up or down on the previous day's settlement price - however, trading is limited to a maximum six cents trading range. The only exception permitted concerns the contract for the current month, which is used as a basis for day-to-day physical business. In this case alone, there is no limit on fluctuations after the first notice day of the month concerned. Terminal markets also have set procedures for taking delivery of contracts, e.g. on the LME the seller has the option of asking the buying to accept delivery from any LME warehouse where he owns metal, and the buyer pays the delivery costs.

In this section, however, we shall only examine in detail two trading procedures, the 'margin calls' of a broker and the 'stop-loss limits' of a commodity trader. These are the aspects of trading which are common to most terminal markets, and which have the most relevance for the purposes of an analysis of the relationship between speculation and price instability.

2.1 Margin Calls

When a futures contract in a commodity is purchased through a dealer on a terminal market, the buyer does not have to put up the full amount of money for the purchase until delivery is due. In the meantime, a "margin" or deposit is required by the broker against the value of the contract.

In those terminal markets where a clearing house system operates, the size of the margin will be determined by the clearing house. The clearing house is the ultimate guarantor of all trading conducted on the exchange, so it will decide upon a prudent safety level for margin deposits to protect itself against the risk of the client's inability to meet his commitments. In other terminal markets, such as the LME, where there is no clearing house and market dealers are themselves responsible for honouring contracts, margin requirements will still be demanded. However, they are set at levels determined by the broker himself, reflecting the creditworthiness of the individual client.

An examination of the margin requirements of copper contracts on Comex will illustrate some of the problems that can arise from this procedure. In May 1980, the margins required for speculative transactions were \$2500 per contract, and for hedge transactions, \$1500 per contract. (The lower hedge margin corresponds with the lower degree of risk; however, for this distinction to work, it is necessary that the motives for futures trading are accurately reported.) A Comex contract is for 25,000 lb of refined copper, which, at a copper price of 90 cents per lb, has a value of \$22,500. Therefore, the initial margin varies from just under seven per cent for a hedger to just over 11 per cent of the total value of the contract for a speculator.

By virtue of the system of margin requirements, the futures trader can purchase copper worth up to fifteen times the amount of his initial outlay. This is beneficial in the sense that few financial resources are tied up unproductively, but as we have noted above, it enables a speculator to gamble with futures contracts whose total nominal value is greatly in excess of the money he has immediately available. This becomes a problem when the market moves adversely, causing the speculator to incur losses if he tries to liquidate his purchases.

The Comex Clearing Association protects itself from the client's potential losses in such circumstances, by raising the margin requirement with a margin call. In the case of a purchaser of a forward contract, when the spot price falls below the contract price, the difference is deducted from the original margin paid. When this deduction reaches 25 per cent of the original margin, the Clearing Association makes a margin call for further deposits to bring the total back up to 100 per cent of the original margin, and thereby ensures that it holds an adequate financial reserve to guard against a possible default. For example, if the spot price fell to 87.5 cents per lb against the contract price of 90 cents, the original deposit of \$2500 (on a speculative futures purchase) will be raised to \$3125 - a 25 per increase.

This increase in margin requirements is a standard procedure for all commodity terminal market clearing houses. Evidently, when a speculator has built up a sizeable 'long' position (though the purchase of futures contracts), he could suddenly find himself with excessive demands on available cash when the market price falls. A striking example of the possible consequences for market stability are examined in the case of the silver market crash below.

2.2 Stop-loss limits

Margin calls are a means of protecting the clearing house or the commodity broker from over-exposure to the risk of financial losses. 'Stop-loss limits' play a similar role for the speculator.

The speculator wants to buy when commodity prices are at their lowest point and sell when they are at their peak. However, he cannot know when turning points in the cycle of prices have been reached. The speculator is willing to bear some losses from an adverse movement of prices, since this is in the nature of his business. Yet he cannot risk seeing a large proportion of the value of his assets wiped out.

For this reason, speculators set 'stop-loss limits' to limit the losses they are liable for, if prices move adversely. A simple example can be given for a speculator who has bought coffee futures and plans to sell the contracts again at a higher price. If the level of prices fall, instead of rising, the speculator will clearly be in difficulties. He may not be in a position to accept delivery of the coffee and hold it until prices rise again, either because of the short-term nature of his investment programme, or because he does not want the coffee market to tie up money which may be needed to meet possible margin calls or other requirements. Therefore he will give instructions for his broker to sell the coffee without further delay if it falls below a certain level. This latter price is called the 'stop-loss limit' for the speculator.

If coffee were purchased at £1800 per tonne, the stop-loss selling limit might be £1500. Evidently, if a number of speculators were in a similar position, then a fall in market prices brought about by excess supply in the market, could be greatly accentuated. As the price breached £1500, thousands of tonnes of coffee futures would be sold to prevent further speculative losses, and the price would be driven down further, and perhaps cut across other stop-loss selling limits.

An analogous case can be given for stop-loss buying, if the speculator had sold forward and has to meet his commitment with a purchase. Here, speculators would enter a rising market and exacerbate the upward movement of prices. These examples are illustrations of the way that the particular characteristics of terminal market trading can, and do, lead to market instability in the short run. Sudden sharp changes in price are magnified by stop-loss transactions; but it must doubtful whether stop-loss trading has a major impact upon the stability of prices averaged over one year or more.

3. AN EXAMPLE OF SPECULATION AND MARKET INSTABILITY

Stop-loss trading is not the only way in which margin requirements serve to accentuate short-run price volatility. Terminal market authorities have the power to vary the level of margins if they believe that the situation warrants it. A build-up in speculative activity is often a cause for such action; and the example which follows demonstrates how this can generate extreme variations in price.

3.1 Speculation in the Silver Market

Perhaps the most famous example of commodity market speculation in recent years was that in the silver market involving the Texas oil billionaire Nelson Bunker Hunt. Looking at the details of this case, we find a clear illustration of how speculation can distort a market.

It appears that Hunt, backed by Arab investors, attempted to acquire sufficient silver to drive up the price and make a vast profit. Hunt bought silver futures, predominantly through his broker Bache Halsey Stuart Shields, and took delivery of the contracts as they matured, so as to create a shortage of metal in the market. At one point, Hunt was reputed to hold 200 million ounces of silver, with his purchases facilitated initially by a margin requirement of only \$1000 on a silver contract for 5,000 ounces.

Although the underlying outlook for silver supply and demand suggested that prices would rise, Hunt's actions had an excessive impact upon the price of silver. It rose from \$6 per ounce in January 1979 to around \$50 by mid-January 1980. Political uncertainty in late 1979, due to the Russian invasion of Afghanistan and President Carter's decision to seize Iranian assets in the USA in retaliation for the holding of American embassy hostages in

Tehran, boosted the demand for precious metals. Asset holders moved their wealth out of currencies, real estate, shares, etc., into what seemed a safer store of value. Consequently, it was not clear how far the rise in the silver price was due to market manipulation. This was soon to become apparent, however.

In response to the speculative involvement in the silver market, margin requirements on Comex were successively raised from \$1000 per contract to \$20,000, to \$40,000 and finally, in January 1980, to \$60,000. This put considerable pressure on speculators in general, and Hunt in particular. Further pressure was exerted when, in late January this year, Comex imposed restrictions on silver trading. Individuals, such as Hunt, were allowed to take delivery of only 500 contracts per delivery month - reducing their ability to squeeze supplies; there was a temporary ban on new futures purchases and most traders were restricted to liquidations only.

The response of Hunt to the growing restrictions upon speculative trading on Comex was to arrange for swaps with leading firms of merchants to substitute stocks of metal held in Europe for Hunt's contracts in New York. However, Comex's actions proved effective in clamping down upon other speculative interest in silver. The immediate result of the January measures was a fall in the silver price to \$36 by the end of January, one week after the restrictions were imposed. The price fluctuated sharply over the next month and a half, although on a downward trend, as the considerable upsurge in the recycling of silver-containing scrap, brought on by the previous run up in prices, created a sudden surplus of silver supplies.

Towards the end of March, the silver bubble finally burst. Hunt announced that he was to issue silver-backed bonds. This led to a crisis in the market which took the news as a sign that, short of cash to meet his financial commitments, Hunt would soon offload some of his silver holdings. A fall in the

price resulted. Hunt's problems were compounded since the fall meant that Bache, his broker, made a £100 million margin call which could not be met with available cash. Hunt's ability to manipulate the market was destroyed and the price of silver collapsed.

The aftermath of the silver market crash was numerous losses among small speculators and broking firms - NRT Metals went out of business and Bache itself lost \$40 million - and a threat to the stability of the whole financial system, as fears grew as to which assets Hunt and others would liquidate to pay off their debts. Only Hunt's limited interests in commodities, other than silver, prevented the panic spreading. In the end, the US Federal Reserve Board had to endorse bank loans to Hunt, despite a policy of disapproving financial aid to speculators, to limit the possible repercussions.

After Hunt's strategy failed, the price of silver returned to more more 'normal' levels. However, it would be complacent to conclude that 'in the long run everything was all right'. Serious manipulation of the silver market took place for at least a year, and the fluctuations in price risked extensive damage to other markets too. The extraordinary measures implemented by the authorities to prevent excessive speculation finally brought the market to heel, but almost precipitated a major crisis.