

and *no loan is extended*, no credit can be involved in a futures transaction, hence the word "margin" has an entirely different meaning in this context, and the purpose of margin is different.

The purpose of margins on futures transactions is to assure the transfer of funds from those who incur losses to those who profit from futures price movements. They are always established at levels intended to cover the prospective price change. These profits and losses must be exactly equal, as there can be no net gain or loss to all participants in futures trading. (Which there can be, and often is, to all owners of securities.) Not only is there a short position opposite every long position in futures, as there is not in securities, but the short sale of a futures contract is exactly symmetrical with the purchase of a futures contract, which is also not true of stock transactions (but is true of the purchase and sale of options to buy or sell securities, referred to as "puts" and "calls").

Let me sum this up with an illustration. When I buy a \$100 share of stock by depositing \$70 margin with a commission firm, the commission firm loans me the other \$30. I may receive dividends which manifest my use and enjoyment of the capital assets which I have purchased. But when I buy a corn futures contract entitling me to receive five thousand bushels of corn next December by depositing \$500 with a commission firm, *neither that firm nor anyone else loans me any money*. I have purchased no capital assets, hence I cannot receive any earnings or other manifestations of the use and enjoyment of a capital asset. From this it is already clear that futures margins are much different from security margins and that the purposes for which the Board of Governors controls the latter could be in no way served by vesting commodities futures margin control in the Board of Governors.

It should also be noted that the relationship between price and the current earning capacity of the capital asset being priced cannot fluctuate over such a wide range, or be distorted over such a long interval, in futures as in the stock market. The price-earnings ratio of the stocks in the Dow Jones industrial average has ranged from 6.4 to 51.5 since 1933, indicative of how far stock prices can range from the true current earning capacity of the physical assets they represent. This fact in itself is hardly reassuring on the point of efficacy of stock margin controls, but the more salient fact is that this has not occurred and could not occur in commodity futures. Commodity futures prices can depart from the true expected earning capacity of the physical asset which they represent also, but this departure is necessarily brief and limited. Prices of commodity futures contracts must come to the actual commodity price from 4 to 12 times a year, depending upon the number of delivery months.

The question of credit expansion, then, has utterly no relevance to commodity futures. The question of excessive speculation may be said to remain, although it remains only in the context of appropriate regulation of futures markets, not in the context of credit controls. If and when excessive speculation should occur in commodity futures, the price level could be temporarily distorted, either upwards or downwards, depending on whether buying or selling was excessive. The questions then become (1) How prevalent are temporary price distortions that result from excessive speculation? and (2) How effective would margin controls be in correcting any such distortions? Our studies of price behavior on numerous futures markets have shown that price movement tends to excessiveness on those markets which have inadequate speculation. The thin futures markets, relatively little used, tend to produce two kinds of price distortion. One kind is the relatively large dips and bulges caused by transactions, since the market is not broad and liquid, buyers have to bid the price up to find sellers, sellers have to offer the price down to find buyers. The other kind of price distortion is the persistence of prices which are too low or too high, as thin markets tend to be lopsided, owing to more persistent trading efforts by one side or the other. The reasons for this imbalance vary from one market to another, but the fact is well established that some thin futures markets evoke persistent underestimates and other persistent overestimates of price. In contrast, prices on the larger futures markets, with more speculation, display smaller dips and bulges and no general tendency to overestimate or underestimate subsequent price levels. The conclusion must be that, in general, *larger* amounts of speculation are desirable. (1)

In specific instances, of course, the mistaken ideas of speculators may carry prices to an incorrect level, even on the largest market. These infrequent dis-