

PROS AND CONS OF CALL AROUND MARKETS

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EXECUTIVE SUMMARY

This study analyzes the effects of call around markets on derivatives trading and on the economy. A call around market is an off-exchange trading venue where trades (1) are arranged over the telephone instead of on a central exchange, (2) are cleared through the facilities of a central exchange, (3) have low minimum contract thresholds, and (4) where trading parties are granted the option of delaying trade reporting. Furthermore, (5) unlike exchange-for-physicals,² call around trades do not involve balancing trades in the underlying cash product. Call around markets are prevalent on Eurex, a European derivatives exchange, and dominate trading in some of Eurex's highest-volume products, including futures options on German Federal Government debt instruments.

Call Around Markets are Controversial

With the introduction of Eurex trading in the United States, call around markets have become a subject of controversy. Call around markets are often favored by large brokerage houses, but criticized by other market participants.

Effects of Call Around Markets on Information

The main arguments surrounding call around markets stem from the possible effects of call around markets on information available to market participants. A central exchange, such as an electronic or open-outcry system, allows all participants the opportunity to bid for all trades, and to quickly learn about market movements. In contrast, a call around market allows only a few market makers to bid for any particular trade, and only one market maker -- the one whose quote is accepted -- will know at what price the trade was finalized or, indeed, whether it was executed at all. Most market makers and other market participants will not even be aware that any particular trade was in the works. These parties may not

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² Exchange for physicals, or EFPs, are trades in which parties exchange both a futures contract and the underlying spot, or cash, product. The futures contract serves as a hedge to the cash product.

learn of the trade's existence and its price and volume information for several hours, if ever. In this way, call around markets can extend market power to large brokers, who distribute client trades among market makers.

Brokers, Clients, Market Makers and Market Power

In the call around system a broker can request quotes from market makers. A market maker is a trader who stands ready to buy or sell from other market participants, making money from the bid-ask spread. In many trade venues, market makers pay brokers to direct trades to them, a procedure known as payment for order flow. Call around markets, in conjunction with payment for order flow, offer the possibility for an unscrupulous broker to profit from matching his clients' trades with selected market makers.

As an example, a broker can, if he or she chooses, request quotes from only those market makers who pay the most for order flow, and market makers may turn to competing on the basis of these side-payments, rather than on providing the best price for the broker's clients. This could result in the broker's clients receiving inferior prices on their trades. In general, this would widen bid-ask quotes. While the extent of this practice is unknown the existence of the opportunity makes it reasonable to suppose that the practice takes place to some extent.

Simulation Shows Call Around Markets Reduce Trade Volume and Societal Gains from Trading

This study presents a simulation involving two market venues: an exchange venue and a call around venue. The simulation demonstrates how the introduction of call around markets has the potential to increase bid-ask spreads, reduce trading activity and decrease the gains to trading for the majority of market participants.

Call Around Markets May Draw Trades Away from a Transparent Venue

Though total volume in Euro bund options (where call around trading is dominant) has been gradually rising in recent years, Eurex data show that on-exchange volume in Euro bund options appears to be decreasing. Furthermore, Eurex options volume appears to be a smaller fraction of total derivatives volume than at exchanges where options are not dominated by call around trading. These observations, while not proof, are at least consistent with the hypothesis that call around markets reduce volume, because :

- If call around markets draw trading away from the central exchange, then we would expect volume at the electronic exchange to fall with rising off-exchange volume. This is what we observe.
- Suppose call around markets do reduce trade volume. Then in an exchange where options are primarily traded via call around, and futures primarily traded on-exchange, we would expect a lower ratio of options volume to futures volume than observed in

equivalent non-call around market systems, such as that for US Treasury derivatives. Indeed, this is what we observe.

Potentially Harmful Effects of Call Around Markets

At least three harmful effects of call around markets can be identified.

A. Price Signals

Inefficiencies in resource allocation due to distorted prices could ensue. It is well known and well accepted that prices are the signals that make the economy efficient. Inaccurate prices create inefficiencies in economic resource allocation.

B. Risk-Shifting

Risk-sharing could be reduced. Financial markets provide hedging opportunities that greatly contribute to the efficiency of the economy by allowing for risk shifting among parties, contributing to the efficiency of the economy. Risk is shifted to those most willing and able to bear it, permitting greater production of many valuable commodities than would otherwise take place.

Some economic agents in view of their ability and training can carry on particular lines of business efficiently and will benefit the economy if they do so. However, if the business is risky, aversion to risk may discourage them from carrying on the business. Hedging by means of derivatives markets provides a way of shifting the risk to others more willing to bear it. If the hedging cost is high the returns from operating a business may not cover the risk and the business, even though it has positive expected net present value, will not be engaged in. In this way the economy as a whole may be denied worthwhile projects.

C. Market Manipulation

Opportunities for manipulation may be increased. Manipulation in exchange markets is facilitated by differences in information between participants. Lack of information about trades increases the possibility of market manipulation.

Eurex Squeezes

Large-scale manipulative squeezes in Eurex-traded derivatives have been reported in 1998, 1999, 2001 and 2002. There is little public information on these or other Eurex manipulations due to low levels of regulatory monitoring and minimal public disclosure. If Eurex traders had more information they might well be unwilling to trade with the manipulating parties, suspecting that these parties are likely to move subsequent prices in their own favor. If participants had enough information to learn of the scheme they could trade in the same direction as the manipulators, in effect, front running the scheme.

Documented Manipulation Based on Differences in Liquidity

Documented cases of information-based schemes exist outside Eurex. For instance, in 1995, Morgan Stanley traders manipulated the prices of ten stocks underlying the NASDAQ 100 equity index in order to profit from positions in the more highly liquid NASDAQ 100 index options market. There is scope for similar manipulative strategies based upon information delays and differences in market liquidity in the Eurex call around system. Such scenarios are discussed in the text.

This study does not claim that call around markets are a necessary ingredient of market manipulation. Other off-exchange trades are possible even without call around markets. However, since information opacity is an ingredient permitting market manipulation, call around markets potentially increase opportunities for manipulation.

Arguments in Favor of Call Around Markets Considered

There are at least six arguments given in defense of call around markets. A major question is whether any benefits suggested by arguments in favor of call around markets are very great in comparison to the costs they subject on other traders, and the economy at large.

A. Possible Widening of Choice

Do call around markets enhance economic efficiency by allowing greater choice in trading? Probably not. The argument that call around markets widen choice fails to recognize the inefficiencies introduced when traders are discouraged from trading at the central exchange. This may occur when volume is drawn from the relatively transparent central markets to opaque and private call around markets. Trading on central markets may be reduced. Call around markets may, then, result in only the most well-connected traders being able to participate, reducing trading opportunity.

B. Liquidity

Is there insufficient liquidity in Eurex options markets to support a central exchange, and are traders therefore forced to seek out and negotiate with counterparties through the telephone? The contention that lack of liquidity is a significant factor is not supported by the experience of options trading in CBOT Treasury markets, where higher options volume is seen even without the benefit of call around markets.

C. Complex Trades

Are call around markets necessary for execution of complex options trades, such as butterfly spreads? The argument that call around markets permit complex trades appears overblown since executing complex trades can be carried out by (1) trading in stages on-screen, (2) using electronic RFQs, (3) using advanced electronic trading platforms or (4) open outcry. These techniques could reduce slippage costs without the information opacity and exclusivity of call around markets. Open outcry systems are proven alternatives. While they may impose costs on

the exchange, these costs also exist in call around systems, but may be less obvious, taking the form of higher brokerages instead. For example, brokers engaged in call around trading may require larger trading desk facilities, lengthier trade negotiations and additional personnel.

D. Front Running

Does the delay in trade reporting, allowed by call around markets, enable brokers to unwind positions free of front running? The front running argument ignores the ease with which brokers can avoid the problem by channeling client trades directly to an electronic or open outcry market in the first place, as well as other ways available to reduce front running risks. Even if front running does occur, it is not clear that it results in significant net economic losses.

E. Stolen Trades

Can pre-arranged trades be "stolen" by a third party if trades are submitted to the electronic system? It is possible. Whether this is truly an argument in favor of call around markets is another question. The market as a whole may benefit from pre-arranged trades being stolen as it indicates a better price has been uncovered. The threat of having a trade stolen, may also compel brokers to compete more fiercely on the basis of price.

F. Naïve Traders

Do call around markets allow uninformed traders to advertise their lack of non-public information and thus qualify for tighter bid-ask spreads? This argument may be suggested by some evidence from equity markets that indicate trades in off-exchange venues indeed carry relatively less information than exchange trades. However, the likelihood of this situation occurring in the case of call around derivatives markets appears remote, given the sophistication of traders, their demonstrated access to non-public information, and the low potential benefit.

Conclusion

It is possible that call around markets confer limited advantages to some market participants. However, on net, the arguments against call around markets are strong, and those in favor are weak.