

INSIDER TRADING RAISES STOCK MARKET VOLATILITY

The prices of shares are substantially more volatile in some countries than others – for example, the Chinese stock market is roughly 3.5 times more volatile than the US stock market. New research by **Julan Du** and **Shang-Jin Wei** finds that a significant cause of higher stock market volatility is insider trading – the buying and selling of shares by people who have information relevant for their prices that is not yet publicly available.

Their study, which is published in the October 2004 *Economic Journal*, shows that if insider trading increases from the relatively low level in the United States to the relatively high level in China, market volatility will rise by 250 basis points. The effect is more important than the fact that macroeconomic fundamentals are more volatile in China than in the United States.

The effect of insider trading on market volatility is, in theory, ambiguous. One influential view argues that by allowing relevant information to be reflected in the share price faster than otherwise, insider trading should increase the relative importance of fundamentals to 'noise'. This should lead to a reduction in market volatility, an improvement in the efficiency of stock markets.

In contrast, a competing view asserts that insider trading can raise market volatility in the long run and reduce economic efficiency. Access to inside information is most valuable when share prices either rise or fall dramatically because insiders can maximise their personal benefits by taking advantage of their knowledge of a share's fundamental value.

As a consequence, insiders may be tempted to find ways to raise price volatility. For example, they may choose riskier projects or riskier technology than they normally would. Moreover, insiders may manipulate the timing and content of the information release in such a way as to increase the price volatility.

Measuring the extent of insider trading is difficult since the conduct of insider trading is, by definition, opaque. Consequently, few empirical studies have been done on the subject. However, a recent survey conducted by Harvard University and the World Economic Forum for their annual Global Competitiveness Report (GCR) polled business executives in approximately 3,000 firms in 53 countries and resulted in a new measure of the extent of insider trading.

Using this GCR insider-trading index, Du and Wei examine the impact of insider trading on market volatility across countries over the period 1985-98. They detect a sizeable impact of insider trading on market volatility.

For example, if the extent of insider trading rises from a relatively low level, such as the US rating of 2.62 on the GCR index, to a relatively high level such as China's rating of 4.62, the volatility of stock market returns increases by 2.5 percentage points. In other words, stock market volatility may go up from 1% to 3.5%.

The researchers show that the positive correlation between insider trading and market volatility is likely to imply a causal relationship: an increase in insider trading leads to a rise in stock market volatility. Furthermore, insider trading leads to higher market volatility even after taking account of the impact on market volatility of:

- the volatility of economic fundamentals – for example, the volatility of the growth rate of real GDP;
- uncertainty about macroeconomic policies, such as the volatility of the exchange rate and the rate of inflation;
- and market liquidity and maturity.

This research has important implications for market regulators, particularly in emerging markets. An adequate legal environment that aggressively cracks down on insider trading may help to create an efficient and transparent stock market with lower volatility. This will in turn promote the development of the capital market generally and raise the growth rate of the economy as a whole.

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Note for Editors: ‘Does Insider Trading Raise Market Volatility?’ by Julan Du and Shang-Jin Wei is published in the October 2004 issue of the *Economic Journal*.

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