

How Foreign Trades Affect Domestic Market Liquidity: A Transaction Level Analysis

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ABSTRACT

The extant literature has documented the significance of foreign trades on domestic markets as well as the importance of commonality in liquidity in a market, but it seems to be silent on how foreign trades affect commonality in liquidity, especially at the transaction level. The lack of research that investigates this line of enquiry provides the overarching research theme for this thesis.

To investigate the research theme I use transaction data from the Indonesian Stock Exchange (IDX) that allows me to identify the trading activities of foreign-versus-domestic investors on a trade-by-trade basis. I find that foreign investors enhance commonality in spread when they initiate trades on both sides of the market which are motivated either by differences in interpreting information or by the desire to trade immediately, but not by information asymmetry. This finding is surprising given the prevalence of asymmetric information evidence surrounding domestic and foreign interaction and the proposition of Chordia, Roll and Subrahmanyam (2000) suggesting that information asymmetry could induce commonality in liquidity. The lack of evidence to link information asymmetry between domestic and foreign investors and commonality in liquidity, along with the findings indicating that foreigners trade more aggressively than locals, lead me to raise and investigate a follow up research question. This second research question is why do foreigners have a propensity to place more aggressive orders as costs associated with these trades are higher?

Investigating the second research question, I find more evidence to exclude information asymmetry as the channel through which foreigners affect commonality in liquidity and

find more evidence to support the finding that foreigners affect commonality in liquidity through their desire to trade immediately. This finding implies that an inventory risks explanation is more appropriate in explaining the impact of foreign trades on commonality in liquidity. Given that foreign trades are aggressive and this affects commonality in liquidity, I then examine whether their trades are motivated by information advantage. Using price discovery analysis, I find that domestic investors make a greater contribution to the price discovery process compared to foreign investors and the contribution of domestic investors to the price discovery process can be explained by domestic and foreign interactions.

Furthermore, analysing the information types that are reflected in domestic and foreign price series, I find that domestic prices reflect firm-specific information while foreign price series reflect systematic information. These findings, along with the findings on the price discovery analysis, seem to suggest that the low contribution of foreign investors to the price discovery process could be due to the fact that they base their investment decisions on systematic information, rather than firm-specific information.

In summary, I find evidence suggesting that foreign investors affect commonality in liquidity through their needs of immediacy rather than information asymmetry. The evidence also suggests that there is a mutually-beneficial relationship between foreign (net) liquidity demanders and domestic (net) liquidity suppliers. This enduring relationship holds up very well during the 2008 financial crisis, demonstrating its resilience.

DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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