

**Determinants of Market Quality:  
A Case of the Stock Exchange of Thailand**

**Abstract**

This study modifies and extends the “Stability-Structure-Challenge (SSC) model”, proposed by Nittayagasetwat, et. al. (1996), into the “Quality-Structure-Challenge (QSC) model”, QSC model is used as an integrated model for empirical study, simulation study and analyze the capital market quality measurements.

There are four implications from this study.

Firstly, there are four quantitative measurements of market quality:

- Liquidity Ratio (summation of daily trading volume over summation of absolute daily return) for liquidity measurement
- Price Range (absolute difference between the highest and lowest daily trading price) for volatility measurement
- Hasbrouck Pricing Error for informational efficiency measurement
- Percentage Bid-Ask Spread for transaction cost measurement

Secondly, from empirical study of the intra-daily data of the Stock Exchange of Thailand (SET), market quality, especially liquidity, transaction cost, and efficiency are always moving in the same direction (if one quality measurement moves to the favorable stage the others will significantly move to the favorable stage and vice versa).

Thirdly, market value, which is one of the proxies for “Product Structure”, shows significant interrelationship with market quality. Furthermore, based on the empirical study, the logical challenge is how can we scale up firm size which will lead to preferable liquidity, efficiency and transaction cost.

Fourthly, the final part of this thesis develops a simulation model. The result from simulation under QSC framework shows that higher proportion of liquidity trader (lower proportion of informed investor), which is one of the proxies for “Investor Structure”, will help improve the liquidity of the market but the other three market quality will be degenerated.

The result from “Product Structure” and “Investor Structure” change confirms that the four attributes of market quality are not automatically correlated. Liquidity is not always favorably correlated to the information efficiency and cost. If more liquidity is induced from informed investor, then higher liquidity will associate with higher informational efficiency and lower transaction cost. Otherwise, the efficiency and transaction cost may degenerate. The result from this study will be the stepping stones for developing more advanced and complicated simulation model based on QSC framework for policy recommendation.