

Discussion Paper regarding the Extension of Trading Hours

July 26, 2010
Tokyo Stock Exchange, Inc.

I. Overview

Tokyo Stock Exchange, Inc. (TSE) is engaged in initiatives to improve the convenience and reliability of the market, in order to better support the wealth-building of all people according to their varying life plans and become a vibrant destination for international investment assets (risk money).

Recently, remarkable changes have been occurring in the environment surrounding the securities market. The needs market users have of our exchange market are also constantly evolving. Under such circumstances TSE has received comments from users requesting an extension of trading hours.

Regarding this extension, there are comments citing the benefits of increased trading opportunities from the perspective of market user convenience. Meanwhile, there are also opinions that, depending on methods of expansion, current market practices, etc. would need to be greatly altered, thus increasing costs overall and possibly decreasing efficiency. TSE believes that this should be pursued while maintaining an awareness of market users' opinions and comparing the costs and needs of the market overall.

Therefore, in order to reassess the needs and other factors of market users with regard to the trading hours of the TSE market, we have prepared the following discussion paper regarding specific measures to extend trading hours and primary issues for such measures. We are seeking responses from a wide variety of related parties regarding the measures and primary issues regarding the extension of the trading hours, and will continue deliberations based on comments and opinions received.

The ideas presented in this discussion paper do not necessarily represent the current opinions and plans of TSE.

II. Measures and Primary Issues regarding Trading Hours

1. Abolishment or Shortening of Noon Recess

Currently, there is an hour and a half recess from 11:00AM to 12:30PM. There have been requests to abolish or shorten this recess.

[Primary Issues]

(1) General Remarks

- **Cash/Derivatives Markets** Given that, except part of Asia, exchanges in the leading countries of the world allow seamless trading without a noon recess, how do you view the TSE noon recess from the perspective of global standards?
- **Cash/Derivatives Markets** Considering the following issues, in the case that the noon recess were to be shortened, what hours would be appropriate for each market segment and why?

(2) Liquidity

- **Cash/Derivatives Markets** In the case that the noon recess were to be abolished or shortened, how do you think this would affect the liquidity of the TSE market? Additionally, what type(s) of investors/investment activities would cause such an effect?
- **Cash/Derivatives Markets** Given that there is a certain amount of liquidity generated by Itayose (a kind of call auction) at the closing of the morning session and the opening of the afternoon sessions, what effect would the loss of these Itayose opportunities have on the liquidity of the TSE market overall?

(3) Trading Practices

- **Cash/Derivatives (Index Futures) Markets** Cash equity basket transactions and EFP transactions using index futures contracts are conducted during the noon recess period, primarily by institutional investors, through negotiated transactions outside the exchange market as regular trading practices. There is the argument that the reason for these types of transactions occurring during the noon recess is that there is no price fluctuation in the cash or futures markets. What effect will abolishing or shortening the noon recess have on these types of transactions?
- **Cash Market** Currently, in addition to the whole-day VWAP (volume-weighted average price), the VWAPs of the morning and afternoon sessions are also widely used in off-auction and off-exchange transactions. If the noon recess were abolished, how would such transactions which use the VWAPs of the morning and afternoon sessions be affected?

- Additionally, in such a case, is there a need for TSE to publicize official and hourly VWAPs equivalent to the VWAPs of the morning and afternoon sessions as a replacement? If such a need exists, what type of replacement should be released, and in what form?
- **Derivatives (Index Futures)** It has been noted that the so-called “NT-Ratio Transactions”, which are a combination of Nikkei 225 futures transactions on the Osaka Securities Exchange and TOPIX futures transactions on TSE, would become difficult to conduct if the trading hours of both exchanges differed. What are your opinions regarding this?

(4) Consistency between Cash and Futures Markets

- **Cash/Derivatives (Index Futures) Markets** For example, if only the noon recess for the index futures market was abolished, and the noon recess for the cash equities market was continued or shortened, when the cash equities market is closed for noon recess and the index futures market remains open, prices may be improperly manipulated in the futures market, thus causing the cash market movement to be unfairly influenced by the index futures market. What are your views on this situation?

(5) Adjustment of Systems and Frameworks

- **Cash/Derivatives Markets** In the case that the noon recess is abolished or shortened, what preparation period is expected to be required for personnel structures or system operations? What are the expected costs of such preparation?
- **Cash/Derivatives Markets** In cases where a malfunction occurs when the market users run their systems, it has been noted that the noon recess is important as buffer time for system restoration. What are your views on this matter?

(6) Other

- **Cash/Derivatives Markets** Are there any other issues regarding the abolishment or shortening of the noon recess apart from those provided above?

2. Introduction of Night-Hour Trading for the Cash Equities Market

There is an idea of establishing a new auction market during the evening/night time period similar to the evening session in the derivatives market, with contracts treated as those for the next trading day.

[Primary Issues]

(1) General Remarks

- **Cash Market** Based on the fact that there are no examples of this kind of night-hour trading in the exchanges of leading countries and trading activities during such time period on proprietary trading systems (PTS), how do you view the introduction of a night-hour trading session to the TSE market?
- **Cash Market** In consideration of the following points, in the case that a night-hour trading session is introduced, what hours would be appropriate for such session and why?

(2) Liquidity

- **Cash Market** In the case that a night-hour trading session is introduced, how will this affect the liquidity of the overall TSE market? Additionally, what type of investors and investment activities would cause such a change?
- **Cash Market** What level of liquidity do you expect for the night-hour trading session? What types of investors and their investment activities will be involved?

(3) Trading Practices

- **Cash Market** What effect do you think the introduction of a night-hour trading session would have on the back-office work, etc. during the same time period?
- **Cash Market** What do you think of conducting clearing and settlement of contracts executed during the night-hour trading session as though they were executed on the following trading day?

(4) Price Discovery Functions

- **Cash Market** In the case that only a specific type of investors, different from those of the regular auction period, participate in the night-hour trading session, there is concern that fair price formation will not occur. What is your opinion regarding this?

(5) System Adjustment

- **Cash Market** In the case that a night-hour trading session is introduced, what preparation period is expected to be required for personnel structures or system operations? What are the expected costs of such preparation?

(6) Other

- **Cash Market** Instead of a night-hour trading session, postponing the close of the afternoon session (3:00PM) is also possible. It has been noted that this would cause the calculation of investment trust base prices to be delayed, and thus have a significant effect on the operations of the entire industry. What are your opinions on postponing the closing of the afternoon session?
- **Cash Market** Are there any other issues regarding the introduction of a night-hour trading session apart from those provided above?

3. Extension of the Evening Session Hours for the Derivatives Market

An evening session where contracts are treated as those for the next trading day is currently provided for the derivatives market, and it would be possible to delay the closing of such trading session.

[Primary Issues]

(1) General Remarks

- **Derivatives** Given that the leading futures and options exchanges in the US and Europe allow seamless trading to a great extent, what are your opinions on extending the trading hours of the TSE evening session?
- **Derivatives** JGB Futures and TOPIX Futures¹ are listed on NYSE Liffe, and starting from this autumn² positions in such products can be transferred to the TSE market. Taking this scheme into account, what are your opinions on extending the trading hours of the TSE evening session?
- **Derivatives** With consideration of the following points, in the case that the evening session's hours were extended, what amount of extension would be appropriate for each product and why?
- **Derivatives** What are your opinions on introducing an evening session for individual equity options, which currently do not have one?

(2) Liquidity

- **Derivatives** In the case that the evening session trading hours were extended, how will this affect the liquidity of the overall TSE market? Additionally, what type of investors and their investment activities would cause such a liquidity change?

¹ TOPIX Futures are planned to be listed on NYSE Liffe in October 2010.

² The position transfer scheme for JGB Futures is planned to be introduced in 2011.

(3) Trading Practices

- **Derivatives** What effect do you think the extension of evening session trading hours would have on the back-office work, etc. that occurs during the same time period?

(4) System Adjustment

- **Derivatives** In the case that the evening session trading hours were extended, what preparation period is expected to be required for personnel structures or system operations? What are the expected costs of response?

(5) Other

- **Derivatives** Are there any other issues regarding the extension of evening session trading hours apart from those provided above?

4. Moving Up the Opening of the Morning Auction Session

Currently, the start of trading for the morning auction session is 9:00AM. It would be possible to extend the trading hours by moving the opening up.

[Primary Issues]

(1) General Remarks

- **Cash/Derivatives Markets** Given the fact that most of the leading exchanges of the world begin trading later than 9:00AM local time, what are your opinions on the opening time of the morning auction session?
- **Cash/Derivatives Markets** In consideration of the following points, in the case that the opening of the morning auction session is moved forward, what time would be appropriate for each market segment and why?

(2) Liquidity

- **Cash/Derivatives Markets** In the case that the opening of the morning auction session is moved forward, how will this affect the liquidity of the overall TSE market? Additionally, why type of investors and their investment activities would cause such a change?

(3) Trading Practices

- **Cash/Derivatives Markets** What effect do you think the moving up of the morning auction session's opening would have on order-placing practices during such time period?

(4) Consistency between Cash and Futures Markets

- **Cash/Derivatives Markets** For example, if only the opening of the morning auction session for the index futures market was moved up, and the opening was left unchanged for the cash equities market, this will lead to a situation where the index futures market opens and the equities market remains unopened. In such a case prices may be improperly manipulated in the futures market, thus causing the cash equities market to be unfairly influenced by the index futures market. What are your views on this situation?

(5) System Adjustment

- **Cash/Derivatives Markets** In the case that the opening of the morning auction session is moved up, what preparation period is expected to be required for personnel structures or system operations? What are the expected costs of such preparation?

(6) Other

- **Cash/Derivatives Markets** Are there any other issues regarding the moving up of the morning auction session apart from those provided above?

5. Other Topics

[Primary Issues]

- **Cash/Derivatives Markets** Regarding the needs for extending trading hours for ToSTNeT, the off-auction trading markets, what are your opinions in regard to each ToSTNeT market?
- Additionally, are there any new functions sought for the ToSTNeT market or areas which should be improved?
- **Cash/Derivatives Markets** In addition to trading hours, are there any areas of the trading rules for the TSE market which should be improved

III. Method of Opinion Submission

Please submit opinions, if any, on this discussion paper via the methods provided below.

Submission by Email:
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Submission by Fax:
+81-3-3666-1026

Submission by Mail:
Tokyo Stock Exchange, Inc. Equities Dept.
2-1 Nihombashi Kabutocho, Chuo-ku, Tokyo 103-8220 Japan

When submitting this document, please include your (1) Name, (2) Affiliation at time of Submission, (3) Address, (4) Phone Number, (5) Mail Address, as well as specifying “Opinion for Discussion Paper regarding Trading Hours”.

Opinions we receive will be compiled along with the views of TSE and released on the TSE homepage, etc. Please understand that, as a general rule, this release will contain the names of corporations, groups and individuals (however, in the case of individuals, only “individual” will be indicated).

Additionally, please understand that TSE will not reply directly to any of the opinions submitted.

IV. Future Plans

We will be accepting feedback from investors and other related parties both domestically and overseas from July 26th (Mon.) to September 10th (Fri.).

We will proceed with further deliberations regarding trading hours in the future, with consideration of the opinions, etc. we receive.

Furthermore, in the case that the trading hours are extended, an outline of rules and frameworks will be drafted, and public comments will be accepted from a wide variety of market-related parties following further deliberations in the Market Structure Committee and Board of Directors.

We deeply appreciate your continuing support and cooperation.