
The Committee for Improving TASE Trading Efficiency and Liquidity

Summary of the Interim Report

September 11, 2013

The following translation is intended solely for the convenience of the reader. This translation has no legal status and although every effort has been made to ensure its accuracy, the Authority does not assume any responsibility whatsoever as to its accuracy and is not bound by its contents. Only the original Hebrew text is binding and reader is advised to consult the authoritative Hebrew text in all matters which may affect them.

Part A

1. The committee was established on the backdrop of the low trading volume on the TASE in recent years, which adversely affects the liquidity and efficiency of the secondary capital market, and indirectly has an adverse impact on the primary market. An examination of trading volume data indicates that while the average daily trading volume of stocks traded was between NIS 1.25 and 1.5 billion every month between 2008 and 2010, this trend changed from the second quarter of 2011 and strengthened in 2012, when daily trading volumes stabilized at an average of NIS 600-800 million, 40% lower than the average daily trading volume of the preceding year and 50% lower than the average daily trading volume in the period from 2008 to 2010. Furthermore, when the stocks traded between 2007 and 2013 were classified by corporate size and marketability (according to average annual market values), shares of 30-35 of the TASE's top-cap firms—or 5% of the total listed shares— account for 85% of the TASE's average daily trading volume.
2. Trading volumes in the derivative market reflect a similar situation. The total trading volume in options on the TASE-25 index in 2013 was only one-half of the average total trading volume in derivatives in the period from 2010 to 2011.
3. Due to the critical need for economic growth, efficient resource allocations, and financial instruments that support sophisticated risk management, the TASE plays an extremely important role as the center of the financial market, whose efficient operations are required both by the growing competition in domestic and international financial markets, and by the rapid technological developments that create new and quickly changing opportunities.
4. In view of the above, the committee was assigned to examine and propose alternatives to improve the efficiency and liquidity of securities listed for trade on the TASE. The committee was requested to study and address the following issues, among others:
 - The launch of new financial products;
 - High-frequency trading;
 - Trading methods and trading orders;
 - Trading fee structure;
 - Establishment of a securities lending depository;
 - Encouragement of foreign investments;The committee has studied these and additional topics, as described in detail in the report.
5. In the course of its work, the committee conducted numerous meetings at which it heard statements by representatives of a large number of stakeholders that operate in diverse areas of the financial market.
6. The TASE's current state of liquidity is not exclusively the result of the operation or non-operation of the TASE itself. To extricate the TASE from its current depression, collaboration should be encouraged between the following key entities: (a) the TASE; (2) the regulator (the ISA, the Commissioner of the Capital Market, and the Bank of Israel); (3) the companies listed on the TASE; (4) the government; and (5) the Knesset. This report focuses primarily on recommendations for the TASE itself, although it also addresses additional

stakeholders, in hope that their cooperation will lead to effective results already in the near future.

Brief description of the committee's main recommendations

1. The TASE as a for-profit corporation

- A. In the last two decades, most stock exchanges in developed countries underwent a process in which they abandoned an affiliate model in favor of new structures of ownership. The ownership structures that were adopted are not identical, and were influenced by the relevant financial and legal environments as well as restrictions stemming from the need to agree on a format with previous owners. Nonetheless, a key feature shared by the new structures of ownership is the transformation of the stock exchange into a financial business for profit.
- B. The shift from the affiliate structure of ownership of stock exchanges to a for-profit corporation model stemmed, among other reasons, from the need to create an ownership structure that incentivizes stock exchange members to invest the resources necessary to deal with the growing competition with other stock exchanges and to facilitate collaboration among stock exchanges (through ownership ties) in order to create and exploit economies of scale.
- C. The committee recommends to conduct an in-depth study of the TASE's current structure of ownership, and of the need and expediency of a change in this structure. This study should also reexamine the existing business ties between the TASE and the clearing houses, and the most appropriate model of control for the TASE.

2. TASE membership classes

- A. According to the membership qualifications and admission procedure defined in the TASE Articles of Association, any company registered in Israel that is not a banking corporation or a remote member, that wishes to be admitted as a member of the TASE is required to meet, among other conditions, conditions pertaining to a minimum number of clients and a minimum total value of its clients' portfolios.
- B. Furthermore, to admit an international financial entity as a remote member of the TASE, the TASE Articles of Association define instructions, including, among others, the need to confirm that the financial entity was incorporated in one of a predefined list of countries, that it has been a member of a closed list of leading global stock exchanges for a period of at least 10 years, and that it will at all times maintain minimum financial resource of one billion US dollars.
- C. The provisions of the TASE Articles of Association determine that a member of a clearing house must also be a TASE member. Global entities that specialize in providing custodial and clearinghouse services in foreign markets are typically interested in providing only clearinghouse and custodial services in Israel.
- D. To encourage the activities of major market makers and nostro traders, it is advised to grant special status to these service providers, which would allow them to connect directly to the TASE, including direct access to lending and other services. Such steps would encourage these service providers to increase the scope of their operations.

- E. The committee recommends to study adding new classes of TASE membership and defining members according to their activities (clearing and custodial services, brokerage, nostro trading), which is conventional practice in foreign stock exchanges.
- F. Furthermore, the committee recommends to distinguish between the qualifying conditions for different classes of TASE members, with emphasis on requirements of minimum shareholders' equity and financial strength, based on the degree of financial risk of the operations of each membership class.
- G. It is hereby advised to examine relaxing the qualifying conditions for remote members, in order to increase the number of remote members and create exposure a greater number of foreign investors. Furthermore, it is advised to study and consider entering into cross-membership agreements with leading global stock exchanges, or at least, to unilaterally determine that membership in a foreign stock exchange (one of a list to be determined by the board of directors) is a sufficient condition for admission as a member of the TASE (within the type of operations in which the foreign stock exchange member is engaged).

3. Lending Depository

- A. In financial markets populated with investors with diverse investment goals and expectations, the ability of players who anticipate falling market prices to employ short-sale techniques and benefit from declining prices is extremely important, as is the ability to use such techniques as an element in sophisticated investment strategies and to hedge risks. Therefore, the option of selling securities short is critical for an efficient market.
- B. As is well known, to employ a short-sale strategy, investors must borrow the security in advance from its owners for an agreed-upon period in exchange for a commission, and sell the security on the market (either on the stock exchange or OTC). The investor's position is closed when the investor purchases the security on the market and returns the borrowed amount to the lender. Investors' ability to borrow securities and sell them short contributes not only to market efficiency but also to market liquidity.
- C. There are several markets in the world where securities lending is conducted through securities lending depositories or a central securities lending service. In the current situation in Israel, the major part of the inventory of securities is concentrated by Israel's two largest banks, and securities lending is not conducted through a central lending service or central system that is accessible by all market players. This fact constitutes a significant obstacle for the clients of other TASE members and prevents them from employing a short selling strategy since the securities they typically seek are not available from the TASE members who provide brokerage services to them.
- D. The committee recommends to establish a central electronic securities depository that will be administered by the TASE clearing house and accessible by all the parties who are active in the financial markets. This will make it easier for players to operate more efficiently, and thereby add liquidity to the market. The lending depository should be administered in a manner that offers an equal opportunity to all the investors whose portfolios contain sought-after securities to lend their securities and gain a commission in exchange. The clearing house should serve as

the Central Counter Party (CCP) and will administer the collateral required for the lending transactions.

- E. Furthermore, it is advised to study and consider establishing a securities lending depository that supports a computerized system of demand and supply in securities lending, and functions as a meeting place of securities borrowers and lenders. Such a system would include a lending book, in which demand and supply would represent the quantities of securities, and the price would represent the lending fee.
- F. To guarantee the success of the securities depository, it is hereby proposed to study incentives that promote the depository's use, especially by the lending bodies. One way is to judge the reasonableness of a decision by an institutional entity not to lend securities through the central depository. An alternative model for consideration is a model in which TASE members are allowed, based on securities lending agreements, to lend their clients' assets in exchange for the lending fee paid to the clients.
- G. The securities depository should be administered in such manner as to provide an equal opportunity to all the owners of a security in demand to lend their securities and earn a commission. The depository should be administered in an egalitarian and transparent manner.
- H. The current securities lending agreements involving TASE members in Israel should be studied in comparison to existing global standards. The Global Master Securities Lending Agreement (GMSLA) is a standard international lending agreement for lenders and borrowers, which is known to foreign investors; In Israel, in contrast, each TASE member uses a unique lending agreement.
- I. **Recommendations for the Short Term:** In view of the transition to securities clearing on day T+1, it is proposed to amend the TASE Articles of Association so that TASE members are required to present the loaned security only on day T+1, the clearing day, and not on the day of the short sale (day T).

4. Algorithmic Trading

Algorithmic trading is the use of technological platforms for analyzing market data and trading in securities, derivatives, and other financial instruments. In algorithmic trading, computers interface directly with the trading platform and enter orders without any human intervention. The computer systems examine market and other relevant information at a high processing speed, and based on this information and on the algorithm that was entered in advance, generate trading orders.

The committee wishes to encourage the activities of algo players and increase their share in trading volumes, and therefore the committee's recommendations also include actions designed to manage the risk that algo trading entails. Numerous recommendations in other chapters of this report, which are not specific to algorithmic trading, should in any case contribute to the expansion of algorithmic trading; These recommendations refer to fee structures, lending depository, access to the TASE, additional order types, and the introduction of a new class of TASE membership. The committee also recommends specific steps and services to encourage algo trading, including the launch of a co-location service, and increased transparency of the information in the order book.

Concurrent with the implementation of these recommendations, stakeholders are advised to reduce the risks that arise from increased activities of algo traders. The

committee therefore recommends to extend the existing controls that apply to the traders themselves, TASE members, and the TASE itself, to orders placed by algorithmic trading. Furthermore, the committee recommends that due diligence of algo traders should be conducted by the TASE and TASE members, according to the risk level of their operations.

5. Promoting competition in the field of brokerage (operations in a closed system)

- A. At present, trading in securities by individual clients is primarily performed through banks (75% of the total trading volume is performed by banks). In such a situation, no competition effectively exists between banks and financial institutions outside the banking system such as non-bank TASE members, despite the attractive commissions offered by the latter.
- B. The fact that non-bank TASE members do not maintain geographically dispersed offices or branches, and the requirement to identify clients face to face when an account is opened, create major obstacles to increased competition in this field. Additional obstacles are the lack of client mobility from the banking system to non-bank TASE members (due to costs and transfer time), and the natural propensity of households to obtain brokerage services from the same financial institution that provides their regular banking services.
- C. In view of this situation, the committee recommends to accelerate passage of the amendment to the Money Laundering Prohibition, which will allow non-bank TASE members access to retail clients, by giving the non-bank TASE members an opportunity to administer client accounts in a closed system. In other words, this will allow non-bank TASE members to accept new clients without the requirement of a face-to-face identification, provided that the funds are transferred from and return to a given bank account. This should increase competition between the banks and non-bank TASE members in the field of securities trading services, especially for private clients. This step would be part of the ISA's road map that defines market development as its focal goal.
- D. The committee recommends to continue efforts to increase competition in the field of securities trading and holding services, especially for private clients, and the committee encourages the Commissioner of Banks, the Bank of Israel, and the ISA to continue to take action to attain this goal.

6. Securities Trading

Similarly to other stock exchanges, no foreign currency trades are conducted on the TASE. Nevertheless, potential benefits to the inclusion of shekel-dollar and shekel-euro currency trading on the TASE include: (a) lower transaction costs (margin savings); (b) increased transparency of quotes and price histories; (c) increased efficiency of trading in foreign currency options (arbitrage, hedging); (d) facilitation of arbitrage involving dual-listed shares; and (e) facilitated investments in Israeli securities by foreign investors.

7. Launching New Financial Products

- A. The committee recommends to consider the introduction of new financial products on the TASE, in order to expand the range of products available to

market players and to promote liquidity of both new and existing products (by using either combined trading strategies and/or by risks' hedging).

B. The committee recommends introducing the following products:

- Changing the multiplier of the underlying asset of the derivatives in the TA-25 index: Since TA-25 is currently above 1,000 points, the underlying asset multiplier causes individual contract size to grow to 100,000 or higher, which prices many investors out of the market. A similar situation occurred in the derivatives of S&P 500, whose underlying asset multiplier is \$500. After the index had risen by several hundreds of points, S&P Mini contracts were offered, which had an underlying asset multiplier of 50 instead of 500. The committee recommends to consider a change in the current underlying asset multiplier (100) and/or to launch trading in derivatives on TA-25 with an underlying asset multiplier that is lower than the current underlying asset multiplier.
- STRIPS: In this process, the elements of principal and interest are stripped from the original bond (“the underlying bond”) and listed separately for trading as a zero-coupon bond and interest-paying coupon. Strips can be issued against receipt of the underlying bond, so that each bond fully backs the payments of the STRIPS units that are issued on its basis. STRIPS are available in many countries around the world, mainly the USA, Canada, France, Italy, Spain, Belgium, Holland, and the UK.
- Contract for Differences (CFD): Contracts for Differences are contracts between two parties to a transaction, a buyer and a seller, in which the seller undertakes to pay the buyer the difference between the current price of a predefined underlying asset and its price at contract time. Contracts of this type are traded in the UK, Hong Kong, Holland, Poland, Portugal, Germany, Switzerland, Italy, Singapore, South Africa, Australia, Canada, New Zealand, Sweden, Japan, and other countries. The committee recommends to study the Australian model, in order to offer CFD contracts on Israeli and foreign underlying assets on the TASE.
- Credit Default Swaps (CDS): This financial instrument can be used to hedge and trade in credit risks of bonds issued by financial or economic entities (Reference Entities) defined in the swap.
- Introduction of multi-currency ETFs: The London Stock Exchange offers ETF instruments that are cleared not only in GBP, but also in USD and EUR. The stock exchange of Switzerland offers similar instruments. The advantage of these instruments is that foreign investors are not required to convert currency, which increases their trading appeal on the stock exchange. The committee recommends to examine the option of clearing high-demand ETS in USD, GBP, and EUR, in addition to clearing in NIS.

8. The TASE Trading System

A. The TASE is close to the completing an examination process of its future trading system. The committee recommends that the new system provide a good solution and support for the following aspects, among others: (1) diverse markets and new financial instruments; (2) diverse trading strategies and sophisticated trading orders; in the immediate term, the committee recommends to implement orders frequently used in foreign stock exchanges: Take Profit, Stop Loss; (3) Block

trading, either in separate trading arenas or in specific concealed (iceberg) orders: (4) Access to Level 2 trading activity data, that is, data on all layers of demand and supply; (5) the technological aspects of the new system. The new system should allow technological access to investors who operate in multiple markets (foreign brokers), and should meet the standards of the world's leading systems.

- B. By prohibiting TASE members from granting CTCI access to specific traders (primarily due to considerations of equality of access), the TASE effectively restricts CTCI access to TASE members. The committee recommends that the TASE allow such ties to specific traders. At the same time, the committee also recommends to examine the option that the TASE will charge a fee for CTCI connections allocated to TASE members.

9. Extending XML-based information dissemination

In recent years, the use of XML (Extensible Markup Language) to disseminate information files has become very common. XML facilitates data transfer tasks between systems that operate on different infrastructures. XML is a standard for the textual representation of information, in which the description of the data is included in the data rather than stored separately. Due to the flexibility of this standard, numerous auxiliary tools have been added to it over the years to enhance the definitions of the information contained in XML files. XML standard and other standards that have been added to it over the years facilitate automatic processing of data and make it possible to develop a more generalized software program for data entry based on the definitions contained in the file, even though these definitions obviously require knowledge of the information contained in the file. As information dissemination in XML files can facilitate and reduce the time required for back-office data processing by information consumers, it is advised that the TASE make preparations to disseminate files using this format alongside with the format currently used by current information consumers.

10. Expanding foreign brokers' communications technologies using Financial Information Exchange (FIX) protocol

FIX protocol is used to send and receive notifications/orders by and between financial entities and internal corporate systems. FIX protocol is also used in numerous stock exchanges to send and receive orders to and from the trading engine, alongside the special-purpose protocols used by those stock exchanges. It is advised that the TASE make preparations to support the use of FIX protocol to transfer trade orders, alongside the use of the exiting CTCI protocol.

11. Trading sessions on the TASE

Today, the TASE is open for trading on Sunday through Thursday, while other stock exchanges in the world operate from Monday through Friday. On this point, the committee believes that incomplete overlap of trading days between the TASE and other world stock exchanges might lead to information gaps and prevent market players from responding to events on global markets, which would adversely affect the liquidity of the local stock exchange. Furthermore, it was argued before the committee that from an operational perspective, foreign brokerage systems overseas process data on Sunday and since the TASE is one of the few stock exchanges that are

open on Sunday, foreign brokers who render brokerage services all over the world are unable to render brokerage services on the local market.

1. The committee recommends to examine whether the benefits of exchanging the trading day of Sunday with the trading day of Friday justifies the costs of this change. The committee proposes that the TASE distribute a written survey to all TASE members and local and foreign investors, to study the cost-benefit aspects of this issue.
2. The possibility of aftermarket trading in several securities on the local market should also be studied, especially securities that attract the interest of foreign investors and/or securities that offer potential for concurrent trading on the local and a foreign stock exchange in a manner that promotes arbitrage trading.

12. The commission model to add liquidity to the TASE

The committee recommends to the TASE to immediately effect a significant reduction in its minimum fee, and study the effect of the reduction on the scope of trading, on trading properness, on TASE trading systems, and TASE members. The committee recommends that the TASE expedite a procedure to further reduce fees, even up to the cancellation of the minimum fee. The committee also recommends to examine the adoption of a trading fee model that promotes liquidity, including a fee structure that promotes high-frequency trading (HFT).

13. Tax rates imposed on marketable securities

The committee believes that in addition to the numerous reforms that have already been implemented, and despite the fact that over two years have elapsed since the most recent reform, trading on the TASE would be promoted by reducing tax rates applicable to investments on the stock exchange by Israeli citizens (regarding securities traded on the TASE compared to other securities) to the rate determined by the Rabinovitz Committee. Therefore, the committee recommends that the government examine a reduction in the rate of capital gains tax, which would encourage companies to raise capital on the TASE and may even increase the government's capital gains tax revenues.

14. Regulatory control

- A. In the course of its meetings, various parties argued before the committee that one of the main reasons for the drop in activity in the financial market in general, and on the TASE specifically, is the increasing regulatory legislation in recent years. In contrast, it was argued that the drop in activity on the TASE is caused by insufficient regulatory control, which consequently has an adverse effect on investors (for example, through debt settlements and excessive executive salaries).
- B. The ISA presented to the committee a road map that was published in September 2012, and on the basis of which the ISA has already launched an outline of suggested relaxed rules of regulatory control. This outline reflects the ISA's position on the need for balance and commensurability in regulation, including, among other things, relaxation of regulations pertaining to corporate reporting, mutual fund managers and investment advisors and managers, while expanding the public's involvement in the legislative process. The committee recommends to

the ISA, the government, and the legislators to accelerate the pace of and extend the proposed relaxations.

- C. Generally speaking, the committee did not address topics of general regulation of the financial market, but exclusively addressed regulatory matters that are directly related to the issue of marketability. Nonetheless, the committee approves of the steps taken by the ISA to relax conditions and the approach underlying these steps, and believes that they should be promoted as quickly as possible. The committee even urges regulators and other relevant government entities related to the financial market to consider relaxations and other actions that could potentially develop the market in the immediate future, which would help promote activity and general economic welfare.
- D. The committee recommends to continue its careful study of various areas of regulation in order to identify fields in which regulatory requirements may be relaxed without an incommensurate impact on the investor public, and to implement such relaxations as far as possible. Among other things, the committee recommends to examine relaxations also in the area of corporate governance.

15. Trading in shares and making markets through the nostro accounts of Israeli commercial banks

- A. Following the bank share crisis of 1983 and the conclusions of the Bielski Commission, all banks assumed a voluntary obligation to the Bank of Israel (which they have effectively upheld since) to refrain from trading in shares on the TASE.
- B. In 2004, the Bechar Commission adopted the recommendations of the Bielski Commission, and recommended, among other things, to separate management of the banks from management of mutual and provident funds, and to allow non-bank entities such as insurance companies, pension funds, and provident funds, to grant loans to the public. As a result of the adoption of the Bechar Commission recommendations, by 2006 the banks had sold the majority of their shares in mutual fund and provident fund management companies to insurance companies and other privately owned companies.
- C. Furthermore, as a result of several fundamental regulatory and commercial changes in recent years, the share of the banks and/or their related companies in the underwriting market declined. This has reduced apprehensions that the banks might create a monopoly in the distribution and consulting market to manipulate the prices of the banks shares and/or the shares of companies in which the banks have a significant holding.
- D. The committee believes that making a market in TASE stocks by the banks may improve market liquidity. Nonetheless, the committee is aware that making a market in TASE shares by the banks might have implications on other areas that the committee has not explored in depth. The committee recommends to explore this issue further before issuing its final report.

16. Restrictions on holding bank shares (5% limit) and its effect on trading volume

According to BoI rules, a holding of over 5% in an Israeli bank is subject to a permit by the BoI. Such a control permit requires a complicated procedure, is limited in scope, and requires the controlling shareholder to meet many restrictions.

In recent years, the financial entities operating on the market achieved accelerated growth, among other reasons, as part of a consolidation process in the capital market sector (see Appendices 3-5). As a result of this process, a significant share of the public's asset portfolio is now concentrated in the hands of several major entities in the Israeli financial market.

The committee believes that the 5% limit is an effective limit and its relaxation would increase trading volume. It is therefore recommended to continue to study this issue further before the committee issues its final report.

17. Analyses

The committee believes that analyses play an important role for institutional players, the investor public, and the listed companies. The committee believes that steps should be taken to promote the publication of analyses of listed companies. The committee recommends that independent analyses of TASE-listed companies should be conducted.

18. Marketing

Share liquidity does not usually arise of itself. Marketing efforts are needed even before a stock is issued to the public, and road show efforts have become a standard marketing method. After an issue proceeds, and even years later, companies must invest in marketing efforts to sustain and promote the demand for their securities. To ensure optimal success, these marketing efforts must be based on a sound foundation of corporate governance, clear and well-defined corporate strategy and its execution over time, best practices, and the assistance of the TASE. It is recommended that the TASE increase its efforts to collaborate with listed companies in order to promote worthy companies and increase the demand for their securities. Furthermore, the committee recommends that the TASE focus its marketing efforts on local and foreign companies that are potential capital-raisers on the TASE.

19. The TASE Research and Education Unit

Developments in the world's financial markets occur today with greater speed than before, and it is more challenging than ever to track changes in stock exchanges, their structure of ownership, structure of revenues and expenses, competitors, market liquidity, new financial instruments, risk management strategies, and risks of new securities or combinations of securities. All these and more require close study by the TASE and the investor public. The TASE should also conduct ongoing in-depth studies of the success or failure of new instruments that are launched on the TASE or overseas, in a manner that does not diminish the TASE's efforts to launch new innovative financial instruments for the benefit of the investor public. The TASE must also explore and gain an understanding of the factors that account for the success of new financial instruments and improve its ability to identify success potential.

The committee recommends that the TASE establish a significant applied research unit to understand developments in trading and in new financial products. Such a unit should set at least the following three goals for itself:

(1) to serve as an in-depth applied research center on topics related to Israel's financial market, possibly in conjunction with one or more academic institutions or with a special-purpose institution to be established for this purpose.

(2) to improve the ability to assess the success potential of new financial instruments.

(3) to expand educational activity (seminars, study sessions, etc.) in order to educate the investor public in proper financial conduct and long-term income-producing investing; and to explain the use, risks, and potential of new financial instruments.

Public Comments

The submission and publication of the interim report concludes the first stage of the committee's work. Before finalizing its recommendations in its final report, the committee is seeking public comments in writing related to the interim recommendations. Such comments should be sent by October 13, 2013. The committee will consider these opinions and suggestions when it develops its recommendations for its final report. If necessary, the committee may, at its discretion, invite commentators to present their opinions before the committee. The committee attributes great significance to public comments and anticipates fruitful cooperation with the public.