
The Committee to Improve Trade Efficiency and Liquidity on the Tel-Aviv Stock Exchange

Final Report

April 2014

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Part A – Report Summary

1. The Committee was established as a response of the downturn in trading volumes on the Tel- Aviv Stock Exchange (hereinafter TASE) during recent years. The downturn results in a decrease in liquidity and efficiency of both secondary and primary securities markets. A study of the trading volumes on TASE reveals that while during 2008-2010 the trading volume reached a daily average of roughly 1.25-1.5 billion NIS per month, a shift in course was evidenced during the second quarter of 2011. The reduction worsened during 2012, so that the average daily trading volume reached an average level of roughly 600-800 million NIS, 40% lower than the daily average volume in the previous year, and approximately 50% of the average daily volume during 2008-2010. Examining the segmentation of stock trading volumes during 2007-2013 (according to average annual market capitalization of the firms listed on TASE) sheds additional light on the issue. Roughly 85% of the daily trading volume converged on shares of the 30-35 firms with the highest market capitalization, i.e. – approximately 5% of the total stocks listed for trade.
2. Examining trade volumes in the derivatives market reflects a similar pattern. Trade volume of the TA-25 Index options during 2013 reached roughly 50% of the equivalent figure in 2010-2011 .
3. The vital necessity in economic growth, efficient distribution of resources, and availability of financial instruments which would enable high level risk management, makes TASE's roll in the capital markets central and significant. It is necessary for TASE to operate efficiently, especially given the growing competition in global capital markets and the rapid technical developments which allows new possibilities but simultaneously requires constant adjustments.
4. Given the above, the Committee was asked to examine and offer alternatives for improving trade efficiency and encouraging liquidity in TASE's listed securities. The Committee was asked to examine, *inter alia*, the following issues:
 - Launching new financial products;
 - High frequency trade;
 - Trade methods and orders;
 - Structure of trade fees;
 - Establishing a securities lending pool;

- Encouraging foreign investors.

The committee's conclusions and recommendations are specified in the following pages.

5. The Committee held numerous discussions, in which a broad range of market participants and regulators took part. In addition, the committee was presented with conclusions of a study conducted by McKinsey consulting firm for Israel Securities Authority (hereinafter – the "McKinsey Study").
6. The reduction in trade volumes was not exclusively caused by TASE's policy. In order to assist TASE recovering from the downturn, cooperation between various entities should be encouraged. Most prominently: (1) TASE; (2) The regulatory authorities (Israel Securities Authority, Commissioner of Capital Markets and Bank of Israel); (3) Firms listed for trade on TASE; (4) The government; (5) The Knesset. The study focuses on recommendations for TASE, but refers also to the other entities, hoping that cooperation will lead to better results.

The following is a summary of the Committee's key recommendations:

1. TASE as a for-profit corporation

- a. During the past two decades, Exchanges in both developed countries and emerging markets, abandoned the "partnership" model in favor of new ownership structures. The adopted ownership structures vary, and are influenced by economic and legal environments, as well as by the necessity to settle with previous owners. Notwithstanding, a key common characteristic of the new ownership structures is Exchanges transformation into a for-profit business.
- b. Changing Exchange's ownership structure stemmed, *inter alia*, from the necessity to incentivize exchange members to invest resources in adjustments with technological progress and increased competitiveness. It will also enable exchanges to broaden cooperation (through ownership ties) and thus benefit from economies of scale.
- c. As the McKinsey Study points out, exchanges around the world who completed the transition to a for-profit model, improved significant parameters in their activity, including transparency, corporate governance, attractiveness, efficiency, tradability, access to capital, and cooperation with other exchanges and investors. Another point demonstrated by the study is that such structure transition may lead to a quick and

natural implementation of actions including the recommendations of this committee, which will increase the attractiveness and competitiveness of the Exchange.

- d. The Committee thereby recommends that TASE will urgently operate in order to change its ownership structure, from partnership to a for-profit corporation structure. In order to minimize conflicts of interests, the new structure should aspire maximize ownership and membership separation.

2. Types of memberships in TASE

- a. TASE's current eligibility conditions requires firms incorporated in Israel who wishes to apply for membership to meet minimum standards of clients number and aggregate value of client securities portfolios. (That is if the firm neither a banking corporation nor a distant member).
- b. International financial entity is eligible to apply for remote membership only if it is incorporated in a closed list of countries and it has been a member for a period of at least 10 years of a of leading international exchange listed in a closed list. An additional requirement, is having own funds of at least 1 billion USD.
- c. TASE's by laws requires clearing house members to be members in TASE as well. There are international entities which specialize in providing custody and clearing services in foreign markets and are generally interested in providing clearing and custody services in Israel.
- d. It is vital to encourage market makers and large nostro traders activity. The committee thus recommends granting a special membership status for entities which can enable market makers and large nostro traders to connect directly to TASE. The committee further recommends incentivizing such entities to increase the scope of their activity by allowing them direct access to lending.
- e. The Committee recommends to add new types of TASE memberships and adjust the membership criteria according to the candidate's type of activity – clearing and custody / brokerage / own-account trading, as customary in foreign securities exchanges.
- f. In addition, the Committee recommends adopting new eligibility conditions who will be adjusted with the various types TASE memberships. The eligibility conditions will emphasize minimum capital requirements and

financial robustness, which will be decided in accordance with the level of financial risk embodied in the specific activity.

- g. The committee recommends to lower the burden of the eligibility requirements for remote membership. Increasing the number of remote TASE members will expose TASE to a greater number of foreign investors. In addition, the committee recommends examining the possibility of entering into cross membership agreements with other leading exchanges. Alternatively, TASE can unilaterally decide, that membership in a certain foreign exchange (which is included in a detailed list of exchanges to be decided by TASE's board of directors) constitutes a sufficient condition for TASE membership.
- h. The committee recommends increasing TASE's accessibility to online brokers .

3. Lending pool

- a. In a market where investors have multiple investment targets and various expectations, there is a great importance for players expecting price reductions to use shorting techniques and enjoy both profits and share price reductions. Complex investment strategies making use of shorting techniques in order to hedge risk constitute another important function. The ability to short-sell securities constitutes a vital component of an efficient market.
- b. As widely known, employing a shorting strategy such as short selling, requires investors borrowing the security for an agreed-upon period in return for a lending fee. The investor then requires to sell the security on market conditions (through an exchange or OTC). The position is closed when the investor purchase the security and returns the borrowed securities to the lender. Thus, the ability to borrow securities and short sell them not only improves the market's efficiency, but contributes to its liquidity.
- c. There are various markets globally where security loans are made through lending pools or through a service provided by a central loans system. Currently, most of the securities inventories in Israel are held in large banks, leaving very little activity for lending pools and central lending systems. This constitutes a significant barrier for other TASE members and their clients, and prevents clients from utilizing shorting strategies such as short selling, since the required

securities are often absent from the inventories of the specific member which provides them brokerage services.

- d. The Committee thus recommends establishing a central computerized lending pool managed by TASE's clearing house, and accessible to all market participants. Such a lending pool will allow participants to operate more efficiently and increase market liquidity. The lending pool will be operate to provide equal opportunity to all holders in their own accounts of securities in demand, allowing them to lend securities for a fee.
- e. The clearing house will serve as a central counter party (CCP) and will manage the collaterals required for lending transactions.
- f. The Committee recommends establishing a lending trade system, which will allow the creation of a computerized system of lending and serve as a meeting facility for borrowers and lenders. This system will include a lending registrar, with demand and supply defining the amount of loans and the price will indicate the lending fee.
- g. In an effort to ensure the success of the lending pool, The Committee recommends to create incentives to use the lending pool, especially by the lending entities. One possibility is to examine the reasonableness of an Institutional entity's decision not to lend securities through the central pool. Alternatively, it is possible to adopt a model whereby TASE members will be permitted to lend their client's assets, under an agreement, with the lending fees given to the clients.
- h. The lending pool will provide equal opportunity to all holders of the requested securities in their accounts, to lend and profit from lending fees. The lending pool will be managed in an equal and transparent manner.
- i. The existing situation where each TASE member has its own lending agreement makes the use of the lending pool cumbersome. Lending agreements used by TASE members should be adjusted to the standard agreements that are in use globally. GMSLA is a standard international lending agreement for the lender and borrower, which is known to foreign investors.
- j. **Short term recommendations** – Due to the transition of clearing securities on the T+1 day, The Committee recommends amending TASE's by-laws to require

TASE members to present borrowed securities on T+1, which is the day the transaction is cleared, rather than on the short sale date (T).

4. Algorithmic trading

Algorithmic trade is the use of technological platforms in order to analyze market data and submit trade orders for securities, derivatives and other financial instruments. In algorithmic trading, computers work directly with trading platforms, submitting orders without human intervention. The computers compare market information and other relevant information using high speed processing, and execute transactions based on the information using pre-programmed algorithm.

The Committee aspires to encourage the activity of algo traders and thus, its recommendations include measures designed to manage the risk embodied in their activity. Many recommendations included in other parts of this report, that are not specific to algorithmic trading, contributes indirectly for extending algorithmic trading activity: Fee structure, Lending pool, TASE's accessibility, Expanded orders variety, and defining new membership status. In addition, the Committee recommends providing services that will encourage algo traders, such as launching co-location services and increasing registrar information transparency. In addition to the implementation of these recommendations, relevant participants are requested to reduce the risks that algo trade involves. The Committee recommends extending the controls exercised for algo trade orders by algo traders, TASE members and TASE itself . In addition, the Committee recommends that TASE members will conduct due diligence tests for algo traders adjusted with the risk level embodied in their activity.

5. Encouraging competitiveness in brokerage firms (closed-ended system activity)

- a. contemporary securities trade by retail clients is mostly performed through banks (about 75% of retail trade activity is conducted through banks). Thus, competition between banks and other entities does not effectively exist. That is despite attractive fees offered by the NBMEs (non-banking TASE members).
- b. NBMEs lack of branches, together with the requirement for an in person identification as a prerequisite for opening an account, constitutes a key barrier to increasing competitiveness. Additional barriers include difficulties for clients in transitioning from banks to an NBME (time and costs) and the natural tendency of households as bank clients to receive brokerage services from a single entity.

- c. The Committee recommends thus, to expedite the amendment for the Prohibition on Money Laundering Ordinance, which will promote NBMEs accessibility to retail clients, by enabling them to manage client accounts in a closed system. i.e., allowing them to avoid in-person identifications, as long as the funds are transferred from a bank account and is transferred back to that same account. Competition between banks and NBMEs will thus improve, especially for retail clients. This measure constitutes part of ISA Roadmap document, in which ISA defined market development as a key goal.
- d. The committee encourages the Supervisor of Banks at the Bank of Israel, and ISA, to expend the endured effort for increasing competition in securities trade and custody services, with emphasis on retail clients.

6. TASE's trading system

- a. TASE is at the final stages of examining its future trading system. The Committee recommends that the new system will provide solutions, *inter alia*, for the following issues: (1) A variety of new markets and financial instruments; (2) A variety of advanced trading strategies and trading orders;– the Committee recommends implementing common orders in foreign stock exchanges: Stop Loss, Take Profit to be performed immediately. (3) Block trading – whether through separate trading platforms or specific concealed trading orders; (4) Distribution of trading data for all demand and supply levels; (5) The technological aspect of the new system – access should be allowed to investors active in multiple markets (foreign brokers), and the system should be in line with the world's best practice standards
- b. TASE limits members CTCTI connections - primarily since providing a CTCTI connection to a specific trader would be bias towards others. The Committee recommends that TASE will enable such connections and simultaneously, examine the possibility of charging fee based on the number of connections allocated to members.

7. Increasing the Use of the XML standard

XML (Extensible Markup Language) is a standard which allows textual representation of information, so that the data's description included in the data itself

rather than saved separately. In recent years, the use of XML has become widespread. XML improves data transfer between various systems operating on different infrastructures. Since the standard is very flexible, various standards have been added to it over time, which improves the information's definition. The XML standard, and other standards which have been added to it, enabled automated data processing and allowed development of a more generalized software program for data acquisition based on the definitions contained in the file, although the definitions require familiarity with the information in the file. Since the use of XML files may mitigate the distribution of information and reduce the time required to process back office data by consumers the committee recommends that TASE will prepare for the distribution of files in the XML format in addition to the currently used format.

8. Enhancing the communications technology between foreign brokers and the TASE using the FIX standard

FIX protocol is used for sending and receiving notices and orders between financial entities and various systems in the same organization. FIX protocol is integrated in numerous exchanges. The Committee recommends that TASE will prepare to assimilate FIX protocol in addition to the existing CTCI protocol.

9. Trading hours on TASE

Currently, TASE is open for trade Sunday to Thursday, while in most other exchanges trading week is Monday to Friday. The Committee opines that the lack of full correspondence with other key exchanges, creates information gaps and limits local market participants from responding to global market events in a timely manner, thus limiting TASE's trade volume and liquidity. In addition, it was suggested to the Committee that from an operational view, the foreign brokers' systems located abroad conduct their processing on Sundays. The fact that TASE is the only exchange active on Sundays limits foreign brokers from providing brokerage services in Israel.

- a. The Committee recommends that the advantage of trading on Fridays in lieu of Sundays in terms of cost effectiveness will be examined. The Committee farther recommends that TASE will publish its proposed changes for comments.
- b. The Committee recommends to consider the possibility of after-market trading in some local securities, especially those of interest to foreign brokers and/or

securities which may potentially be traded both locally and internationally, so as to encourage arbitrage trading.

10. Foreign currency trading

In similarity with the majority of exchanges around the world, TASE does not conduct foreign currency trading. However, number of potential advantages for allowing NIS-USD and NIS-EURO trading exist, such as: (1) Mitigating foreign investors to invest in Israeli securities; (2) Mitigating arbitrage trade in dual-listed stocks; (3) Reducing transaction costs (saving on the margins); (4) Transparency of the quotes and price history; (5) Improvement in efficiency of trade in foreign exchange options (arbitrage, hedging).

11. Launching new financial products

- a. The Committee recommends promoting the launch of new financial products for trade in TASE. Such a measure will extend the variety of products available to market participants and encourage liquidity, in both new and existing products (as part of combined trading strategies and/or risk hedging).
- b. The Committee recommends launching trade in the following products:
 - Changing the underlying assets' multiplier in derivatives on the TA-25 Index – since the TA-25 Index is currently higher than 1,000 points, the underlying asset multiplier causes each contract to be 100,000 or higher, thus forcing many investors out of the market. A similar situation occurred in the S&P 500 derivatives, whose underlying asset multiplier was \$500, and after the index has increased by hundreds of percentage points, contracts called S&P Minis have been launched, with an underlying asset multiplier of 50 in lieu of 500. The Committee recommends examining the possibility of changing the underlying asset multiplier and/or the launch of trading in derivatives on the TA 25 Index, with an underlying asset multiplier which is lower than the current one (100).
 - Issuing STRIPS – this is a procedure for simplifying the principal and interest components of an original debenture (hereinafter – "the Underlying Debenture") and listing for trade each component separately, such as zero coupon (hereinafter – "STRIPS" or "STRIPPING"). STRIPS are issued against obtaining the Underlying Debenture, so that each debenture fully covers the payment of the STRIPS units issued based on it. This instrument

exists in many countries around the world, primarily: the US, Canada, France, Italy, Spain, Belgium, the Netherlands and the UK.

- Issuing contracts for differences (CFDs) – this is a contract between two parties to a transaction: a "buyer" and a "seller", in which the seller undertakes to pay the buyer the difference between the underlying assets' price at the time the obligation was made to a latter to its price at a later time predefined in the contract. Such contracts are traded in the UK, Hong Kong, the Netherlands, Poland, Portugal, Germany, Switzerland, Italy, Singapore, South Africa, Australia, Canada, New Zealand, Sweden, Japan, etc. The Committee recommends examining implementation methods for extensive CFD trade in both Israeli and foreign underlying assets listed on TASE.
- Credit Default Swap (CDS) – a financial instrument which allows hedging and credit risks trade of debentures issued by a financial entity (reference entity), which was defined for this purpose as part of the swap transaction
- Launching multi-currency ETFs – the London Stock Exchange offers ETFs cleared not only in Pounds Sterling but also in USD and EURO. The Swiss Stock Exchange offers similar instruments. The use in multi-currency instruments enables foreign investors to participate in trade without having to convert currencies, and thus remove a central barrier for international trade and enhance the exchange's attractiveness. The Committee recommends an extension of TASE's ETFs clearing services to include US Dollar, Pounds Sterling and EURO, in addition to NIS.

12. Fee model for increasing liquidity

The Committee recommends that the minimum fee charged by TASE will be significantly reduced, effective immediately. TASE will then examine the reduction's effect over trade volumes, trade regularity, TASE's trading system and TASE members. The Committee recommends TASE to consider further reductions and discuss the possibility of revoking the minimum fee. Finally, the commission recommends adopting a trade fee model, which will encourage liquidity and increase trade frequency.

13. Tax rates imposed on tradable securities

The Committee opines that tax rates reductions will encourage trade in TASE. Thus, the Committee recommends for tax authorities to reduce tax rates on capital gains. Tax rate reduction will incentivize companies to raise funds on TASE and may eventually result in increased gains deriving from capital gains levy.

14. Regulation

- a. Various entities argued before the committee. It was repeatedly argued that activity reduction in the capital market and particularly in TASE, was mainly caused by the recently expended regulatory supervision. Opposite arguments were heard as well. It was argued that it was the lack of sufficient regulation that caused the and damaged investors (e.g. – debt settlement agreements and excessive officeholder remuneration).
- b. Israel Securities Authority presented the Committee with its Roadmap document published in September 2012. As the roadmap specifies, ISA has already launched a proposal for facilitating regulation. The proposal reflects ISA's perception regarding the necessity in balanced and proportional regulation. The proposal includes – *inter alia* –facilitations in corporations reporting duties, mutual fund managers, and investment firms. The proposal also speaks of extending public involvement in legislation procedures. The Committee recommends that all relevant organs will act to accelerate legislating in accordance.
- c. The Committee avoided discussing general regulation issues, and focused in issues directly related to tradability in TASE. Nevertheless, the Committee opines that ISA's facilitation strategy is a step in the right direction, and encourages its fast promotion. The Committee encourages all market related authorities to consider farther facilitations and act as soon as possible for the joint target of market development.
- d. The Committee recommends the relevant regulation to be thoroughly examined in an effort to identify possible facilitations that can expend market activity and at the same time preserve investor's interest. The Committee specifically recommends the adoption of facilitations in corporate governance.

15. Regulation by the Capital Markets Division

The ministry of finance's capital Market Division had recently published an amendment to a temporary provision supervising Financial Services (Provident Funds) Regulations of 2008 (hereinafter – the "Direct Expenses Regulations" 2nd amendment). The proposed amendment allows institutional investors to collect direct expenses for assets currently listed by the regulation, up to a maximum sum of 0.25% of the assets' revaluation. Decisions regarding the internal distribution among various types of direct expenses, within the total expense limitation, will be subject to each institution's discretion.

The committee was presented with the argument that a bias approach was taken to favor foreign investments over local investments. Thus, for example, for investments in ETFs tracking Israeli indices traded on TASE, it was proposed that no direct expenses can be charged, while such charging will be possible for foreign indices ETFs, subject to the above mentioned limitation.

Other arguments regarding the proposed regulation referred to the distinction made between direct expenses incurred in tradable assets and non-tradable assets. It was argued that enabling expense deduction in non-tradable assets may make non-tradable assets favored by investors in Israeli market.

The Committee is aware to the importance of equal standards applicable in Israel and abroad. It thus recommends addressing the concerns regarding discriminatory approach who favors investment abroad and investment in non-tradable assets.

16. Market making in nostro accounts by commercial banks in Israel

- a. Following the Bank Stock Crisis in 1983 and the Beisky Committee's recommendations, banks had voluntarily obliged to refrain from trading stocks on TASE. This undertaking is still valid and implemented.
- b. In 2004, the Bachar Committee was established and adopted the Beisky Committee's recommendations. It farther recommended, to separate management functions of banking activities, mutual funds and provident funds. Another recommendation was to enable non-banking entities such as insurance companies, pension funds and provident funds to engage in credit activity. As a result of adopting the recommendations of the Bachar Committee, and other regulatory changes, by late 2006 the majority of banks holdings in mutual funds' and provident funds' managing companies were sold to insurance and other private companies.

- a. The Committee opines that market making in stocks listed on TASE by the banks may increase liquidity. That being said despite the committee's awareness to the conflict of interests that may arise as a consequence. Due to recent reduction in conflict of interest degrees within the banks, the Committee opines that it is possible to allow banks to widely use as market makers in TASE and, simultaneously, avoid conflict of interest.

17. The banks stock holding limitation (5%) and its impact on trading volume

Bank of Israel's regulation requires any person or entity which holds more than 5% of an Israeli bank to obtain a controlling share-holder permit. Such a permit is not easily granted, it is a complex procedure. A permit granted, imposes numerous limitations on the controlling shareholder.

In recent years, financial entities activity had rapidly expanded, *inter alia* as part of a consolidation process which occurred in the capital market industry. As a result, the market's structure changed to include several large entities managing significant amounts of the public's assets portfolio.

The Committee opines that removing the 5% limitation will increase TASE 's trading volume. The Committee is aware of the current ongoing discussions among regulatory authorities, in an effort to provide a solution to this problem, and emphasizes the importance of making progress on the issue as soon as possible.

18. Analyst reviews

The Committee opines the analyst reviews plays an important role in capital markets. Such reviews are relevant for all market participants inclusive of institutional investors, local and foreign retail investors, and firms listed for trade on TASE. The Committee opines that the publication of analyst reviews concerning listed firms should be encouraged. The Committee therefore recommends adopting independent analyst reviews in accordance.

19. Marketing

Stock liquidity is rarely created by itself. Marketing efforts are required even prior to initial issuing, and the use of "Road Show" method has become thus an accepted and required standard. Marketing efforts are required even after an IPO has been

launched, at least in the first couple of years. In order to maximize success, marketing efforts should rely on robust corporate governance, clear and well defined strategy, long term strategic implementation, best known practices and TASE's support. It is recommended that TASE will increase its cooperation with firms listed for trade in an effort to increase demand in worthy securities. In addition, the Committee recommends TASE to focus its marketing efforts on firms that has strong fund raising potential both locally and globally.

20. Establishing a research and instructional unit at TASE

Developments in global capital markets occurring much faster nowadays than they did before. Changes in exchanges structure, revenues and expenses structure, competitive environment, market liquidity migration, new financial instruments, risk management strategies, risks inherent in new securities or combinations thereof are constantly happening. It follows that a thorough learning process is necessary in order to keep pace. A thorough and ongoing analysis of new instruments performance launched on TASE and exchanges abroad is required. TASE should strive to understand the causes for success or failure of new instruments and improve its ability to identify other potentially successful instruments for investors benefit. In addition, TASE is required to analyze the ramifications of changes in trade environment on trade liquidity and efficiency (new products, regulation, fee structure, etc.).

The Committee thus recommends that TASE will establish a research group, with an applied orientation, in order to have better understanding of developments in trade and new financial instruments. It farther recommends specific aims for the research group:

1. To serve as a center for thorough applied research on subject matters related to Israeli capital market, possibly in cooperation with academic institutions or with a specific entity to be established for this purpose;
2. To analyze ramifications of changes in trade environment (new products, regulation, fee structure, etc.) which effects trade liquidity and efficiency ;
3. To improve assessment abilities for predictions on the success of new financial instruments;
4. To expand instructional activities (seminars, study meetings act.), in an effort to educate investors for responsible financial behavior and long term investments

and to familiarize investors with new financial instruments, including potential revenues and embodied risks.

21. Market development projects at ISA

Various finance pending business activities in Israeli market, relies mainly on credit institutions and private loans. As part of the implementation of ISA's Roadmap document, ISA's staff is evaluating alternatives for capital market developments. ISA strives to remove obstacles and create financing models which would provide alternatives in raising funds through capital market. Possible alternative in discussion include: Municipal bonds, infrastructure investment funds, real estate investment funds, funding of entrepreneurial properties, commercial securities, credit funds for small and medium businesses and issuing structured instruments in Israel. Such initiatives require a complex and creative regulatory infrastructure and cooperation of all relevant authorities. Tax incentives and governmental support are specifically important. The Committee strongly supports those initiatives.