

TDCC

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OUTLOOK

Bolstering the Market Efficiency, TDCC Expedites the Digitization of the Trading Documents for the Fixed Income Commodity

SPECIAL REPORT

TDCC Chairman & CEO Sherman Lin Elected ACG Vice Chairman

BUSINESS HIGHLIGHTS

Functionalities Boosted, Information Provisions of the ePASSBOOK Further Diversified

Market News- A Quick View of TWSE Intraday Continuous Trading on March 23, 2020

Diversified Online Debit Authorization Service

Shareholder E-Voting Hits Record Highs as Institutional Investors Fulfill Principles of Responsible Investment

FINANCIAL TECHNOLOGY

TDCC Building a Big Data Analysis Platform

STATISTICS

STOCK MUSEUM

Taiwan Stock Museum to Work with Textbook Publisher in Promoting Financial Knowledge and Education

GALLERY

Bolstering the Market Efficiency, TDCC Expedites the Digitization of the Trading Documents for the Fixed Income Commodity

TDCC has been sharing the momentous task of developing the capital market of Taiwan. In response to the digitization technology progressions and the market demands, following the successful digitization of the application documents for commercial paper issuing in October 2018, TDCC is intensively planning the digitization of fixed income products' trading documents, so as to provide the trading information exchange services amongst the participants.

As for now, after the negotiation of the rates, term and underlying products for bills or bonds over telephone calls, dealers still need to print out a physical copy of the transaction record, fax it over to the investors for confirmation. The physical documents then are to be delivered to the investors for safekeeping. Not only are these procedures dependent on manual handling, but also are subjects to the risk of data loss. To minimize the dealers' labor and to bolster the market efficiency, TDCC is planning the digital transmissions of the trading documents for bonds and bills.

Considering the complete connections of the systems with bond dealers, bills finance companies and custodian banks, TDCC gives priorities to the document transmissions to and from those market participants, and the electronic information exchange platform construction; the main points are outlined as below:

- 1.The physical receipts between the bond dealers and the customers of the custodian banks, namely the trade confirmation slips, payment/settlement slips and repo certificates, will be electronically transmitted via computers connected to TDCC's system. Functions such as transaction confirmations, corrections and cancellations as well as early termination of repo transactions will be made available for electronic transmissions.
- 2.The physical receipts of trading amongst the bills finance companies will be conveyed electronically via computers connected to the system in TDCC. Upon the completion of the platform construction, functions such as mutual transaction confirmations, the production of the trade confirmation slips, and all the concerned messages will be sent automatically for all parties' acknowledgements.

As the comprehensive structural and operational procedure planning has been completed, currently, TDCC is contemplating all the feasible applications of innovation Fintech in ensuring the data integrity, non-repudiation and security; thus, the operating costs can be lowered, and the efficiency and assurance of the bonds and bills transactions in the secondary markets can be uplifted.

TDCC Chairman & CEO Sherman Lin Elected ACG Vice Chairman

To raise the international presence of Taiwan securities market, TDCC has long been actively participating in global CSD events. This year, Chairman & CEO Sherman Lin was elected ACG Vice Chairman at ACG 23 and will serve as the board member of WFC (World Forum of CSDs). This accomplishment has highlighted TDCC's proactive involvement in international organizations and endeavor in elevating Taiwan's international status; it has also created a new milestone for TDCC's 30th anniversary this year.

Mr. Sherman Lin said, "Facing Fintech trends, TDCC has been conducting digital transformation to meet diversified market needs through innovative technology, and this is also one of the right directions for global CSDs' transformation. Last year, we successfully established Investor Services Task Force in ACG and would like to contribute more to our community by running for ACG Vice Chairman. I am honored to have support from ACG members to be Vice Chairman and happy to have this opportunity to lead TDCC team in augmenting our services to ACG. During my tenure, I will do my duty to make ACG a better platform for communication and strive for excellence."

There are five major regional CSD association, including ACG, ACSDA, AECSD, AMEDA and ECSDA. ACG is composed of 35 members and is the one with the most members among the five; it is also the most significant communication platform for CSDs in Asia Pacific. TDCC served as the founding member when ACG founded in 1997, elected executive committee member in 2016, and became the convenor of Investor Services Task Force in 2018. This time, Mr. Sherman Lin was not only elected ACG Vice Chairman, but also represents ACG together with the ACG Chairman to serve as the board members of WFC. Mr. Sherman Lin will dedicate himself to promoting collaboration among WFC members and to increasing ACG's international presence.

This November will mark the 30th anniversary of TDCC. The achievement of the past thirty years has been built on the basis of innovative technology and diversified services in response to global trends. Looking forward to the fourth decade, TDCC will proceed with both financial digital transformation and connection to international market so as to provide better services to Taiwan's capital market and show the world its softpower of creativity.



Functionalities Boosted, Information Provisions of the ePASSBOOK Further Diversified

Since the release of the new and elevated ePASSBOOK 2.0 by TDCC in November 2018, it has been praised by investors. In fact, the number of the active users has been optimistically increasing, to date, the number has exceeded 730,000. To extend the seamless user experience even further, TDCC has made some new features available in the ePASSBOOK App as of July 11, 2019.

First, the equity card; it advises the investors of their depository and settlement accounts which have not been adapted into the electronic format in ePASSBOOK. Meanwhile, it provides the contacts of the recommended securities firms for the investors as well. The App users can have more comprehensive information of their assets once they have all their depository and settlement accounts transformed from paper passbook to ePASSBOOK.

In addition, to enable all investors to stand on top of the funds and investment information of all kinds, another ePASSBOOK's new feature, fund announcement push notification service, provides instantaneous access to material information on funds; hence the full benefits can be appreciated. Besides, the new function - "investment pre-calculation" enables investors to select the preferred investment plan as the reference for their investment decisions, either a Lump Sum investment or a Systematic Investment Plan. For some target funds, in a desired period, investors can have certain understanding of the ROIs (Return on Investment) of their funds.

Market News- A Quick View of TWSE Intraday Continuous Trading on March 23, 2020

TWSE is amending its practices to bring the advantages of continuous trading to its markets. Below are quick views of this trading method:

1. Continuous trading of stocks, ETFs, ETNs and TDRs is scheduled to begin on 23 March 2020. Continuous trading of warrants started on 28 June 2010.
2. Call auction remains in place during the market open, close and intraday live price sessions. Continuous trading in session is Intraday.
3. Market data which include trading price, volume, best 5 bid/ask price and volume are disclosed on a "real time" basis, and a "5-second snapshot" is also provided.
4. New type of orders includes limit orders which is currently in use. March 2020 brings market orders, immediate or cancel (IOC) orders, and fill or kill (FOK) orders. These enhance investment flexibility and trading strategies.
5. In order to limit extreme price fluctuation, intraday volatility interruption is in place. Whenever the trading system detects that the potential execution price of a specific stock will fall out of a specified range (+/-3.5%) as compared to the weighted average traded price over the preceding 5 minutes, matching for that stock is postponed for 2 minutes. The suspended stock will resume trading with a call auction, then return to continuous trading.

For more information about continuous trading, please link to:

<https://www.twse.com.tw/en/page/products/trading/information13.html>

Diversified Online Debit Authorization Service

When customers apply for their subscription with a sub-distributor via the TDCC fund trading platform, the payments can be remitted by either a money transfer or a debit from the pre-authorized account. However, when the latter method is chosen, the payment would only go through if investors have physically filled up a fund debit payment agreement in advance; the entire procedure may take up to 10 days. What's more, the sub-distributors, the remittance banks and TDCC all need to engage time and efforts to process and deliver to and fro those documents.

In order to cut the paperwork process time of customer's seal/signature verification for those customers who choose the debit payment for their fund transaction, TDCC has been collaborating with Financial Information Service Co., Ltd. in "designating accounts online" since 2016, so that the conventional practice of applying authorization by papers can now be conveniently adapted into an online digital application with an IC ATM card. Now the customers can enjoy the advantages of instantaneous fund debit payment online.

As advantageous as it is, some obstacles in fully utilizing the aforementioned service are to be removed, such as the necessity of presenting an IC ATM card, and to have a compliant card reader at hand; plus, this authentication service was not accessible by a mobile device. In March of 2019, TDCC started to enhance this project by enabling the online debit payment remittances through electronic banking services. In the 1st half of 2019, the fund trading applications ratios of utilizing an IC ATM card and the electronic banking service are 45% and 55%, respectively. By the end of the year, 12 other banks will take part in this service, and more banks will follow. It is expected that a more optimal online debit payment service will be presented to the investors.



Shareholder E-Voting Hits Record Highs as Institutional Investors Fulfill Principles of Responsible Investment

The advent of the ex-dividend season means the annual general meetings of most companies have been convened, and that TDCC's e-voting platform has once again accomplished its mission to allow investors to exercise their voting rights as shareholders in a quick, convenient and dematerialized fashion. As of June 30, 2019, a total of 1,757 listed companies on the TWSE and TPEX markets accepted e-voting, and shareholders who voted electronically accounted for 52.54% of the attendances. So far in 2019, the e-voting platform has processed more than 7.37 million votes, representing over 313.3 billion shares. Compared to the same time last year, the vote count, underlying share number and even the voting rate have all reached record highs once again, showing the results of Taiwan's efforts to promote shareholder activism.

The evolution of technology has made smartphone an indispensable gadget in modern life. In recent years, TDCC has talked to various investors in an attempt to find out the inconveniences in the process of investment for future improvement. Take e-voting for example, in the past, investors could only vote in front of a PC with an electronic certificate, but after years of upgrades and expansion, the e-voting service is now accessible via TDCC's e-PASSBOOK application and the trading applications of 48 securities brokerages, which accounts for 90% of securities brokerages in Taiwan. This means investors can trade stocks, check account balance and vote online with the same application. To ensure that investors remember to vote, TDCC's e-voting system can automatically send a push notification containing detailed starting and ending dates of voting to shareholders during the prescribed voting period on the condition that they are eligible to vote and have a valid TDCC e-PASSBOOK.

TDCC has been committed to the promotion of e-voting, and with the full support from the Financial Supervisory Commission, and with institutional investors voluntarily becoming a signatory party of TWSE's "Stewardship Principles for Institutional Investors," which consist of six principles that recommend institutional investors to proactively exercise shareholder's rights and interact with the invested companies where appropriate to enhance corporate governance and fulfill responsible investing, consequently creating a win-win situation for both investors and the invested companies, this year, the weighting of e-voting in the aggregate holdings of institutional investors surpassed 90% for the first time, at 92.61%. The percentage of securities and futures brokers engaging in e-voting was above 98%, and the figure for government funds was even higher at 100%, suggesting the government is taking the lead in supporting better corporate governance in Taiwan. As a collaborating partner of TWSE, TDCC has also provided the Stewardship Principles to institutional investors for their participation. A corporate governance portfolio score is assigned to all participating institutional investors and is calculated based on the corporate governance ratings of their invested companies, and portfolio weightings by market capitalization. This will help institutional investors know where they are compared to all signatory parties en masse, in terms of responsible investing, and eventually bring about positive competition.

Moving forward, TDCC will arrange more seminars and company visits to understand the needs of market participants and keep improving the e-voting platform by further integrating ePASSBOOK functions to provide better services to investors and make shareholder services more accessible and user-friendly.

TDCC Building a Big Data Analysis Platform

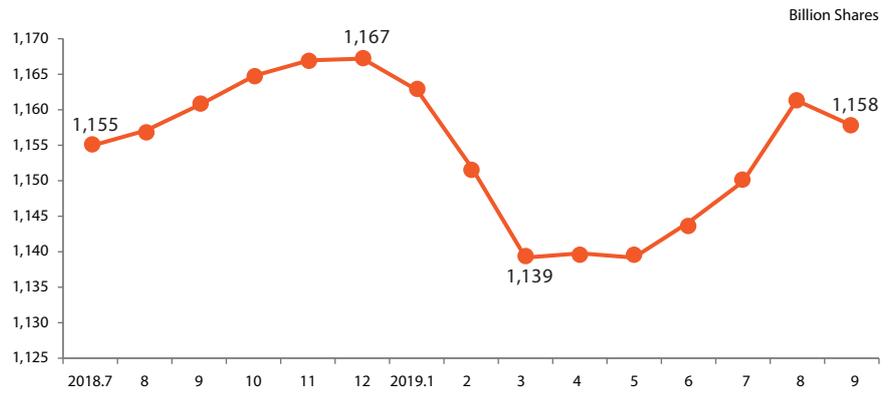
In order to develop financial technology (FinTech) services, TDCC intends to build a Big Data application platform to combine the data of multiple internal systems for analysis. Moving forward, TDCC plans to introduce external databases, including those holding the government's open data, to expand the scope of applications and create more value in TDCC's information services. The cross-system analytical technology adopted by the platform can produce active charts to facilitate analysis of TDCC's internal businesses and help the government strengthen market supervision. Analyses for TDCC participants and investors will also be made available in the future.

The build-out project commenced in January 2019, with sub-projects including installation of data storage devices, management and compilation architecture for cross-system data, and visualized chart analysis functions. Upon completion, the platform will first serve the competent authorities, such as the Central Bank of the Republic of China, Banking Bureau, Securities & Futures Bureau and Insurance Bureau of the Financial Supervisory Commission, for supervisory purposes, in addition to business analysis within TDCC. More functions will be added in the future to provide more valuable analytical services.

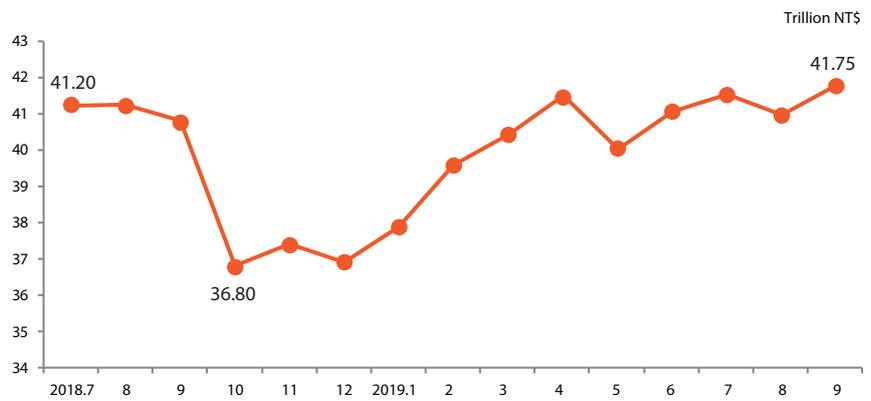
Phase I build-out was completed on April 30, 2019, and the platform is open to the Central Bank and Banking Bureau for the supervision of short-term bills from June 10. So far, the platform has run smoothly. Phase II engineering, which aims to serve the Securities & Futures Bureau for fund supervision purposes, is scheduled to be completed on July 31, followed by the launch of phase III functions on September 30 to help the Insurance Bureau analyze international bond data. Development of new functions will be continued afterwards.



Equities in Custody
(Shares)



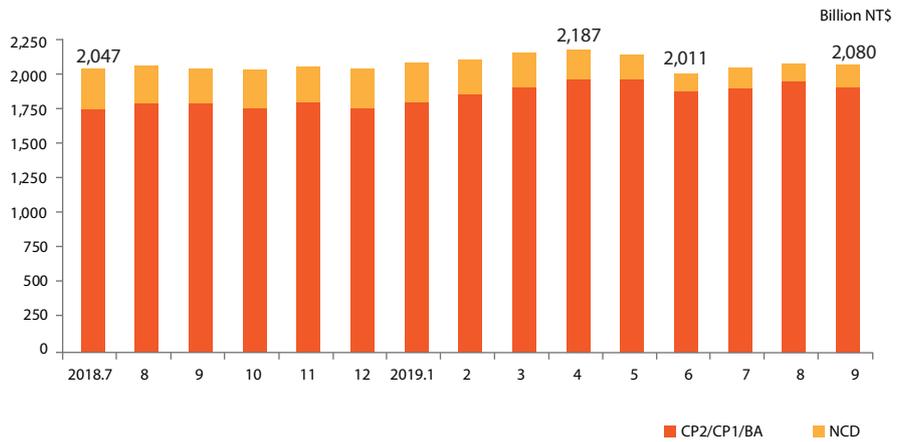
Equities in Custody
(Market Capitalization)



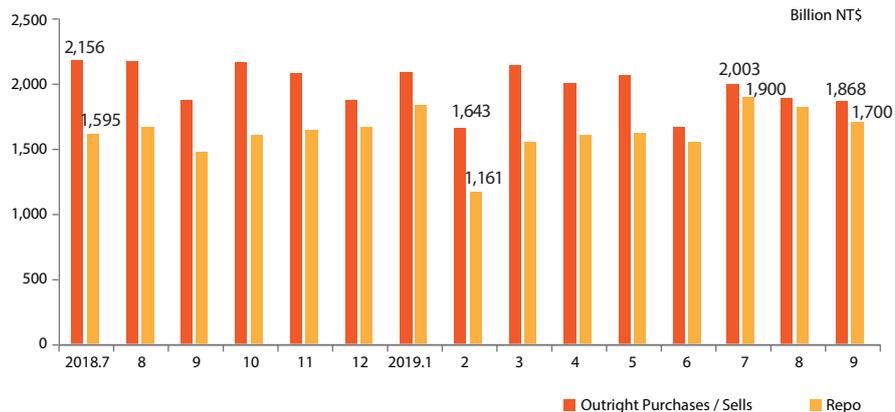
Book-Entry Operations
(Shares)



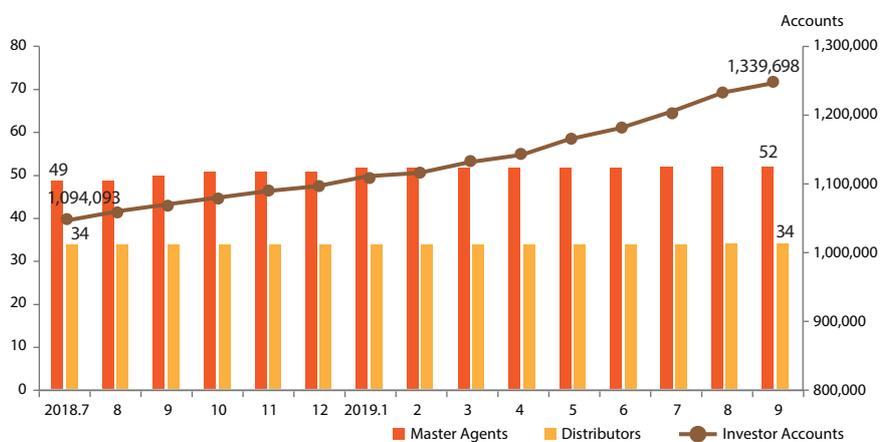
Short-Term
Bills in Custody



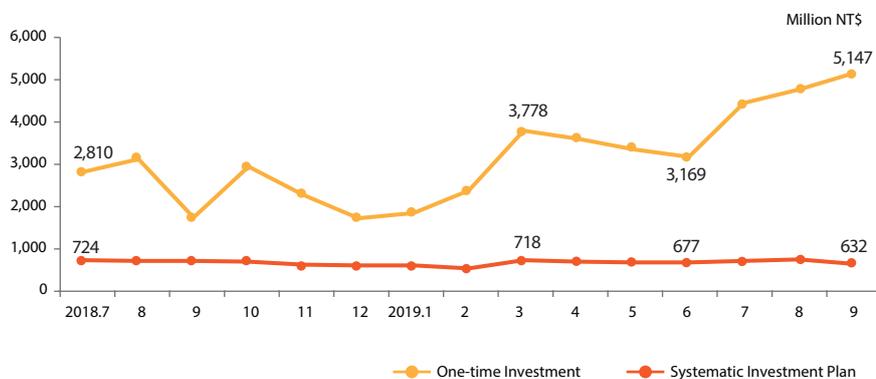
Secondary Market Clearing & Settlement of Short-Term Bills



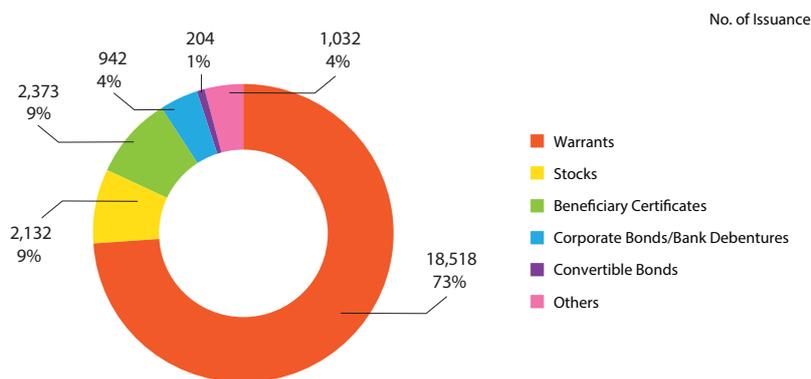
Offshore Fund Operations



Offshore Fund Subscriptions



Registration of Dematerialized Securities



Taiwan Stock Museum to Work with Textbook Publisher in Promoting Financial Knowledge and Education

Taiwan Stock Museum is committed to the promotion of financial knowledge and education to help the general public, in particular students, understand the development of Taiwan's stock market, including the evolution of stock dematerialization. Taiwan Stock Museum displays precious historic securities and artifacts, as a supplementary component of school curriculum. Since its opening on December 24, 2012, the museum has received more than 136,000 visitors, over 80% of which are students at various levels. Indeed, Taiwan Stock Museum has become one of the best educational venues outside of schools.

As a textbook publisher for primary and secondary education in Taiwan, Nan I Book Enterprise Co., LTD intends to produce an educational film, tentatively named "Exploring the Taiwan Stock Museum" as an auxiliary material for the subject of social studies at junior high school to enhance students' learning interest. The film will be distributed to Nan I's educational institution clients for free. As the film could potentially attract more school teachers and students to visit, Taiwan Stock Museum appreciates the goodwill of Nan I and agrees to collaborate with the publisher in promoting financial knowledge and education.



Chairman & CEO Mr. Sherman Lin (left 4) took a group photo with FSC Chairman Mr. Wellington L. Koo (center), TWSE Chairman Mr. Jan-Yau Hsu (right 3), TPEX Managing Director & CEO Ms. Yu-Ching Su (left 3), TSA Chairman Mr. Hung-Wen Chien (right 2) and other guests at the 10th annual TWKC Press Conference on July 1, 2019.



At the 2019 Award Ceremony of Financial Supervisory Commission (FSC), Mr. Sherman Lin, Chairman & CEO of TDCC (right 2), Mr. Wellington L. Koo, Chairman of FSC (center), together with our recognized staffs for their outstanding performances in the financial sector on August 16, 2019.

President Mr. Han-Chiang Chu (front, right 3) leads managements to attend the fifth Financial Literacy for Youth (FLY) seminar on August 30, 2019.





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