



### In this issue:

- TDCC hosting “Digital Finance 3.0: Innovation and Outlook” seminar
- TDCC launched foreign currency NCD issuance and clearing services
- TDCC & Market Statistics



Mr. Nguyen Quang Long, Deputy Director General of Vietnam State Securities Commission, led delegates to visit TDCC for exchanging opinions of ETF on 1st Dec. 2015.



TDCC held “Digital Finance 3.0: Innovation and Outlook” seminar on 18th Sept. 2015.



## TDCC hosting “Digital Finance 3.0: Innovation and Outlook” seminar

To respond to the rising trend of digitalized financial services, TDCC organized a seminar of “Digital Finance 3.0: Innovation and Outlook” chaired by President Mr. Sherman Lin, on September 18, and invited experts from the academic, public and private sectors to share their opinions on the applications and latest development of digital finance. The operations of the financial industry will go through fundamental changes given disruptive innovation from the prevalence of the Internet, mobile communications, social networking websites, cloud-computing and big data. Governments across the globe have sought to capture the new trend through deregulation, establishment of dedicated government units, and organization of consulting meetings in an attempt to formulate adequate policies. The Financial Supervisory Commission (FSC) launched a “Bank 3.0” program earlier this year, marking the commencement of digital finance promotion in Taiwan, to encourage local financial companies to adopt innovative technology in their services, enhancing the operating efficiency and competitiveness, and consequently supporting the development of the FinTech industry in Taiwan. During the seminar, Mr. Peng Hsuan-kuang, Director of the Information Systems Office of the Securities & Futures Bureau, said the Financial Technology Office, which is under direct supervision of the FSC Chairman, is drafting a blue map for FinTech policies and development in Taiwan. The Financial Technology Office will establish a subsidiary Financial Technology Consulting Committee to provide suggestions and help setting directions for FinTech development policies. For its digital finance policies,

the FSC has four major objectives: (1) providing online services to investors; (2) opening crowd funding platforms for equity-based projects; (3) allowing financial institutions to invest in the information services and FinTech industries; and (4) promoting the applications of cloud-computing and big data in the securities and futures markets. Mr. Peng also mentioned that the financial sector is closely intertwined with the other industries, and any financial security loopholes could leave the other industries vulnerable to attacks. A breach of financial information security would expose investors to serious privacy and security risks, and therefore early precautionary and remedial measures are crucial to the industry. The FSC will amend and supplement laws in a timely fashion and inform investors of the updates in the shortest time possible.

TDCC President Mr. Sherman Lin said the applications of mobile technology, big data, cloud-computing, social networks and the Internet of things have and will continue to help financial companies transform their operations and provide innovative services. TDCC gathered a digital finance task force in early 2015 to plan out the digitalization of existing businesses. To date, TDCC has launched an app for shareholder e-voting, and upgraded the core IT systems. A Bank 3.0 task force was summoned in February 2015 to work on the replacement of passbook with a mobile device, and comprehensive IT system update. TDCC also started working with Gartner in 2015 to learn about the application of the latest technologies, which should help TDCC better understand the future trends of digital finance, re-model the IT framework and eventually provide more convenient and innovative services.

## TDCC launched foreign currency NCD issuance and clearing services

Given the Central Bank's policy to build a mechanism for issuing foreign currency negotiable certificates of deposit (NCD), Taiwan Depository & Clearing Corp. (TDCC) launched new services on August 31 under the supervision of the Financial Supervisory Committee (FSC). The services include foreign currency NCD issuance, secondary market's clearing & settlement and online redemption of bills at maturity, and should help provide more secure and efficient services for the new financial product.

As a part of the Central Bank's efforts to build a well-rounded foreign currency NCD market, TDCC has engaged in the general planning and establishment since 4Q14, including the development of clearing & settlement systems and the new financial product per se, in continued collaboration with the issuing banks, bill dealers and custodian banks. Having confirmed the market mechanisms in May, 2015, TDCC finished the system development and testing in just three months, allowing the system to come on stream on August 31.

On the first day of the service launch, a total of seven local banks (Bank of Taiwan, Changhwa Bank, Mega Bank, Taiwan Business Bank, Standard Chartered Bank, E. Sun Bank and CTBC Bank) and three Chinese banks (Bank of China, China Construction Bank and Bank of Communi-

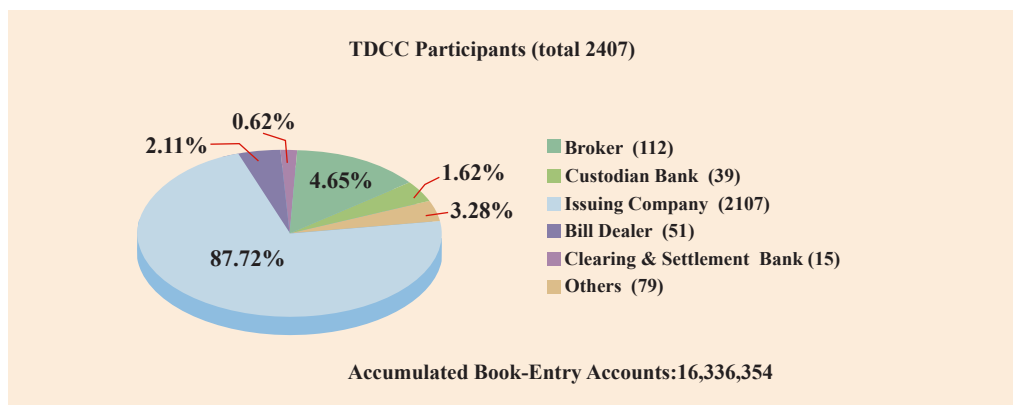
cations Taipei branch) issued 34 foreign currency NCDs valued at US\$2.285 bn and RMB2.85 bn, respectively, with flexible terms ranging from 7-274 days. The first foreign currency NCD was issued by Bank of China (Taipei branch), valued at RMB600 mn, and purchased directly by Bank of Taiwan. With a respective issuance value of US\$850 mn and RMB1.15 bn, Bank of China was the biggest issuer of both USD and RMB NCDs of the day.

TDCC has launched delivery versus payment (DVP) services for NTD bills and bonds in 2004 and 2006, respectively. With a daily clearing value of NT\$330 bn, TDCC has played a crucial role in securities clearing and settlement in Taiwan. Notably, TDCC has been able to expand its cross-border clearing and settlement capabilities by establishing a connection to the foreign currency clearing platform of the Financial Information Service Co. (FISC) on July 28. Thanks to this infrastructure expansion, TDCC is able to roll out the foreign currency NCD services on August 31. Euroclear also said that its clients may participate in the trading of Taiwan-issued foreign currency NCDs from now on. In other words, the new services are also open to foreign investors.

TDCC intends to facilitate the development of Taiwan's financial market by providing custody and settlement services that are trust-

worthy, safe and efficient. The provision of foreign currency NCD depository and clearing services by TDCC will not only expand the foreign currency fund-raising access and money market instruments available to banks, but also allow bill dealers and investors to put their funds to more efficient uses by leveraging short-term bills, which offer both high liquidity and diversity. And the new services should help banks develop their wealth management business. So far, TDCC already launched the first stage to provide clearing and settlement services for issuers distribute NCD to bill-dealers in August 2015. It is expected that TDCC will further implement second stage to provide services for issuers distribute to investors in January 2016.





**The Shares and Market Capitalization under TDCC custody** ( Million Shares/ Billion NT )

Item Year Month	Physical securities under custody		Dematerialized securities under custody			Total	
	Shares	Market Capitalization	Shares(A)	Ratio (A/B)%	Market Capitalization	Shares(B)	Market Capitalization
2014 Dec	36,762	371.60	1,046,570	90.34	32,723.83	1,083,332	33,095.44
2015 Jan	36,725	371.23	1,052,549	90.40	32,974.03	1,089,275	33,345.26
2015 Feb	36,690	370.88	1,051,290	90.39	33,844.33	1,087,980	34,215.21
2015 Mar	36,665	370.63	1,052,193	90.40	33,848.92	1,088,859	34,219.56
2015 Apr	36,649	370.47	1,062,712	90.49	34,655.63	1,099,361	35,026.10
2015 May	36,608	370.06	1,069,933	90.53	34,309.67	1,106,542	34,679.73
2015 Jun	36,589	369.86	1,073,478	90.56	33,194.27	1,110,067	33,564.14
2015 Jul	36,570	369.67	1,079,353	90.38	30,898.88	1,115,924	31,268.56
2015 Aug	36,528	369.26	1,083,163	90.41	29,433.95	1,119,691	29,433.95
2015 Sep	36,479	368.72	1,095,874	90.51	29,528.13	1,132,353	29,896.90
2015 Oct	36,462	368.60	1,089,463	90.46	30,945.98	1,125,925	31,314.58
2015 Nov	36,453	368.51	1,089,372	90.46	30,598.19	1,125,826	30,966.71

TDCC still has 7.23 million pieces of stocks which have been de-listed from the TWSE or GreTai markets.  
The outstanding of such physical stocks equals to 9.72% of all TDCC depository shares.

**Statistics of Listed Companies**

Item Year Month	TWSE				TPEX			
	NO.	Capital Issued (Billion NT)	Par Value (Billion NT)	Market Value (Billion NT)	NO.	Capital Issued (Billion NT)	Par Value (Billion NT)	Market Value (Billion NT)
2014 Dec	854	6,783.39	6,665.33	26,891,503	685	679.56	640.00	2,680.56
2015 Jan	856	6,790.71	6,668.87	27,081,366	687	680.60	640.00	2,661.16
2015 Feb	856	6,807.78	6,679.30	27,859,490	687	681.48	641.00	2,686.90
2015 Mar	858	6,811.33	6,698.29	27,787,490	692	686.65	643.00	2,834.73
2015 Apr	858	6,812.78	6,699.43	28,480,849	694	688.59	645.00	2,873.75
2015 May	859	6,819.52	6,719.03	28,150,415	697	689.67	645.00	2,863.58
2015 Jun	862	6,828.48	6,728.16	27,135,035	697	689.43	646.00	2,709.55
2015 Jul	864	6,849.01	6,714.30	25,275,490	697	690.71	646.00	2,396.09
2015 Aug	865	6,924.32	6,740.14	23,860,273	697	692.41	647.00	2,175.40
2015 Sep	866	6,934.03	6,817.92	23,896,918	698	700.67	650.00	2,402.41
2015 Oct	869	6,941.14	6,833.44	25,013,804	700	701.49	651.00	2,556.08
2015 Nov	871	6,952.32	6,839.65	24,387,843	703	702.88	652.00	2,675.32

## Statistics of Bills Clearing &amp; Settlement

Million NT

Item Year Month	Primary Market		Secondary Market				Total
	Underwriting/First	Redemption	Buy/Sell	Repo-Open	Repo-Close	Subtotal	
2014 Dec	905,954	920,125	1,625,076	1,737,362	1,749,420	5,111,858	6,937,937
2015 Jan	922,472	842,945	1,602,128	1,585,734	1,626,210	4,814,072	6,579,489
2015 Feb	698,265	691,952	1,277,188	1,098,952	1,104,626	3,480,766	4,870,983
2015 Mar	1,030,614	1,020,136	1,750,550	1,580,424	1,554,074	4,885,048	6,935,798
2015 Apr	995,862	946,103	1,834,690	1,421,058	1,513,500	4,769,248	6,711,213
2015 May	885,424	941,212	1,532,798	1,455,698	1,435,732	4,424,228	6,250,864
2015 Jun	867,413	892,415	1,488,568	1,596,992	1,467,798	4,553,358	6,313,186
2015 Jul	920,793	906,854	1,650,038	1,642,410	1,657,756	4,950,204	6,777,851
2015 Aug	827,141	871,127	1,494,694	1,591,096	1,638,588	4,724,378	6,422,646
2015 Sep	907,249	900,698	1,629,644	1,529,072	1,522,334	4,681,050	6,488,997
2015 Oct	917,932	906,755	1,701,420	1,541,802	1,531,228	4,774,450	6,599,137
2015 Nov	893,991	893,283	1,535,592	1,486,278	1,477,418	4,499,288	6,286,562

## Par Value of Bills and Bonds Under Central Depository

Million NT

Item Year Month	Bonds	Commercial Paper I	Commercial Paper II	Negotiable Certificate of Deposit	Bank Acceptance	Asset Backed Commercial Paper	Municipal bond	Total
2014 Dec	3,332,073	170	1,306,837	106,992	1,153	0	0	4,747,225
2015 Jan	3,316,524	145	1,392,220	101,187	1,127	0	0	4,811,203
2015 Feb	3,330,160	124	1,402,571	97,229	888	0	0	4,831,152
2015 Mar	3,354,766	121	1,418,606	91,880	857	0	0	4,866,230
2015 Apr	3,325,572	150	1,458,106	101,990	976	0	0	4,886,794
2015 May	3,338,061	155	1,418,300	85,835	1,145	0	0	4,843,496
2015 Jun	3,343,082	189	1,388,797	90,605	843	0	0	4,823,516
2015 Jul	3,366,779	176	1,349,644	143,758	795	0	0	4,861,152
2015 Aug	3,406,308	158	1,326,970	122,540	718	0	0	4,856,694
2015 Sep	3,439,459	161	1,337,667	118,289	823	0	0	4,896,399
2015 Oct	3,430,520	150	1,375,915	91,089	967	0	0	4,898,641
2015 Nov	3,412,672	133	1,363,182	104,729	785	0	0	4,881,501

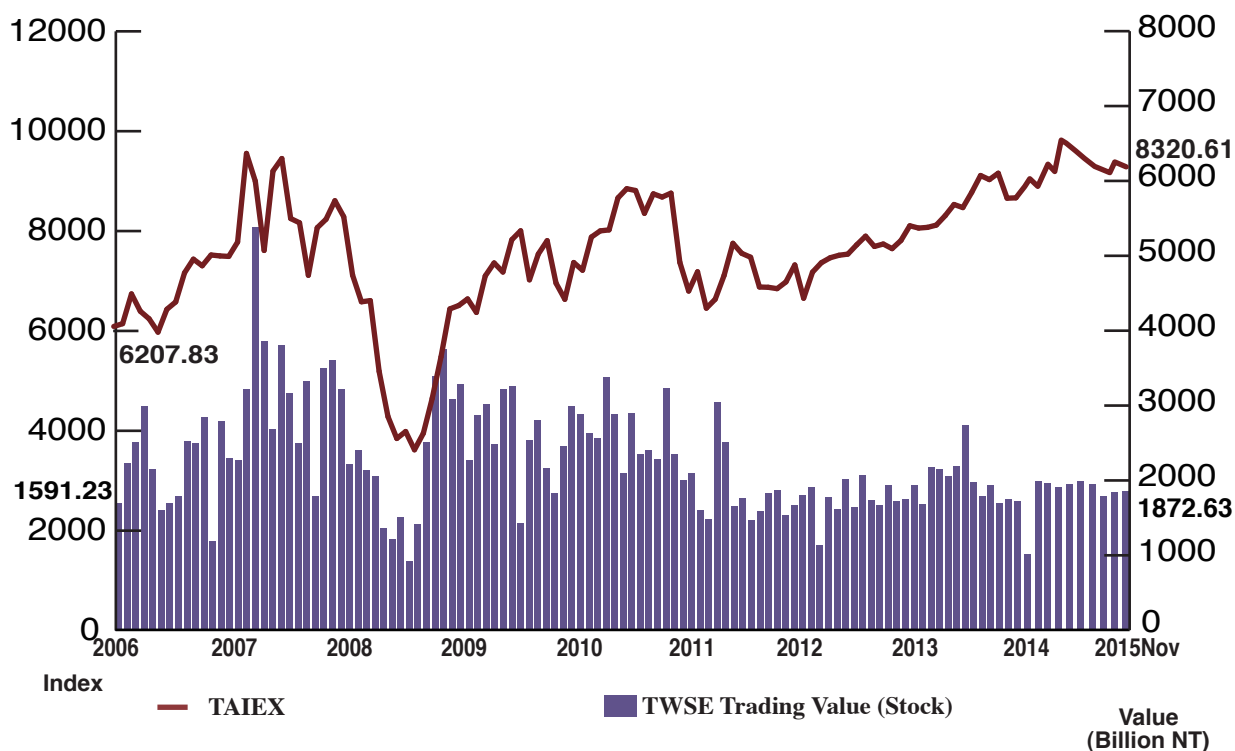
Note: Starting July 2008, the value of bonds are changed from par value to principal balance.

## Statistics of Book-Entry Operations

1,000 Shares

Item Year Month	TWSE		TPEX		Emerging Stocks
	Total Trading Volume	Average Daily Trading Volume	Total Trading Volume	Average Daily Trading Volume	Trading Volume
2014 Dec	125,513,491	5,229,729	27,103,418	1,129,309	558,076
2015 Jan	107,859,926	5,392,996	21,328,789	1,066,439	649,496
2015 Feb	54,618,000	4,201,385	10,764,831	828,064	359,928
2015 Mar	111,591,097	5,072,323	29,731,707	1,351,441	817,268
2015 Apr	112,044,487	5,602,224	24,017,469	1,200,873	644,467
2015 May	111,735,772	5,586,789	23,282,741	1,164,137	472,826
2015 Jun	109,886,555	5,232,693	23,919,191	1,139,009	433,086
2015 Jul	115,016,030	5,228,001	23,499,746	1,068,170	499,777
2015 Aug	109,831,603	5,230,076	16,517,415	786,544	406,315
2015 Sep	86,165,770	4,308,288	16,727,984	836,399	333,382
2015 Oct	95,156,927	4,531,282	22,594,770	1,075,941	366,133
2015 Nov	96,008,721	4,571,844	23,706,649	1,128,888	614,789

TWSE Index & Trading Value



TPEX Index & Trading Value

