

2022年營業報告書 2022 Business Report 創新擘拓 Broadening— Expanding creatively



前言

2022年我國期貨市場交易量達3.84億口,較2021年微幅減少2%,日均量則約156.3萬口,受通膨與升息影響,2022年臺股現貨市場交易量減少,惟期貨市場交易量相對穩健,發揮避險功能,外資參與比重與2021年相當,為31.21%。在各商品表現上,2022年四大主力商品分別為:臺指選擇權、小型臺指期貨、個股期貨及臺股期貨。其中小型臺指期貨日均量為329,392口,成長12%;臺指選擇權日均量為816,031口,成長0.9%。另小型電子期貨及小型金融期貨日均量成長34.9%;美股三大指數期貨日均量亦成長37.2%。

在新商品方面,期交所為便利交易人參與,2022年6月27日推出具我國產業特色之半導體30期貨及航運期貨,提供交易人更多避險增益商品,並落實普惠金融精神。另為滿足交易人對於不同存續期間契約交易需求,期交所於11月9日掛牌臺指選擇權雙週到期契約,增加交易機會,帶動整體臺指選擇權日均量較2021年同期,由65.7萬口成長至82.7萬口,同時推出小型臺指期貨雙週到期契約,持續為臺灣期貨市場注入新成長動能。在交易制度方面,動態價格穩定措施自2018年建置以來,陸續適用於國內外股價指數期貨、臺指選擇權、匯率類期貨、ETF期貨、個股期貨及商品類期貨,2022年持續擴大動態價格穩定措施適用於電子、金融及ETF選擇權,半導體30期貨及航運期貨於上市當日亦同步納入動態價格穩定措施適用商品;目前期貨市場商品近99.9%交易量皆已適用動態價格穩定措施。另為提供ETF交易人直接避險工具,降低隔夜風險,2022年將ETF期貨納入夜盤交易,交易人亦可與其他夜盤商品或美股ADR進行跨商品交易。

在店頭集中結算制度方面,為提升我國店頭衍生性金融商品交易安全、效率與透明度,期交所於2022年7月25日建置我國店頭衍生性金融商品集中結算機制,訂定符合國際規範與業者需求之制度規章,建立穩固風險管理機制;積極輔導11家金融機構成為結算會員,參與集中結算業務;成為全球少數自建店頭結算系統之交易所,掌握我國金融關鍵知識與系統技術;取得歐盟證券及市場管理局(ESMA)認可為第三國合格結算機構,獲美國商品期貨交易委員會(CFTC)核發監管豁免(No-Action Relief),大幅提升外資參與我國集中結算市場意願,促進整體金融市場發展。在期貨集中交易市場結算制度方面,為使結算制度接軌國際,2022年2月18日調整以風險基礎方式計算結算會員應繳存之交割結算基金及市場發生違約時之分擔金額,另7月21日修正交割結算基金總額計算方式,以強化我國市場財務防衛資源,維繫交割結算基金之風險承受能力。

除於本業持續耕耘努力外,期交所亦持續響應政府照顧弱勢公益政策,積極規劃各項公益活動,落實 社會關懷,達成企業永續經營及實踐社會責任目標。2022年成果豐碩,臺灣期貨市場已連續3年突破3億 口大關,表現亮眼,期交所將持續努力不懈推動各項業務成長,帶領臺灣期貨市場迎向更璀璨的未來,以 下就2022年期貨市場發展概況,説明如後。

Introduction

In 2022, TAIFEX's trading volume reached 384 million contracts, a slight decrease of 2% from the previous year, with ADV of 1.563 million contracts. Affected by inflation and rate hikes, the trading value in the cash market in 2022 decreased, but the futures market was relatively stable and served its role of hedging tool. Foreign participation accounted for 31.21% of the total trading volume, equivalent to that in 2021. The top four traded products in 2022 were TAIEX Options, Mini-TAIEX Futures, Single Stock Futures and TAIEX Futures. Among them, the ADV of Mini-TAIEX Futures was 329,392 contracts, an increase of 12%; the ADV of TAIEX Options was 816,031 contracts, an increase of 0.9%. In addition, the ADV of Mini Electronics Sector Futures and Mini Finance Sector Futures grew by 34.9%, and the ADV of the three US equity index futures grew by 37.2%.

In terms of new products, TAIFEX introduced Taiwan Semiconductor 30 Futures and Shipping and Transportation Sector Futures on June 27, 2022, offering market participants with more trading and hedging tools. Catering to the market demand for various durations of contracts, TAIFEX launched bi-weekly TAIEX Options on November 9. The launch drove the ADV of TAIEX Options from 657,000 contracts in 2021 to 827,000 contracts in 2022. Meanwhile, bi-weekly Mini-TAIEX Futures were also introduced at the same time to add more growth momentum into the Taiwan futures market. In terms of trading mechanisms, the Dynamic Price Banding Mechanism (DPBM) has been applied to all equity index futures, TAIEX Options, FX futures, ETF futures, single stock futures, and commodity futures since its inception in 2018. In 2022, TAIFEX further expanded the DPBM-applicable products to Mini Electronics Sector Futures, Mini Finance Sector Futures and ETF Options, and Taiwan Semiconductor 30 Futures and Shipping and Transportation Sector Futures were also added to the list on the day of their listing. Currently, nearly 99.9% of trading volume of products in the futures market are applicable for the DPBM. In order to provide ETF traders with direct hedge instruments and help reduce their overnight trading risks, ETF futures were added to the after-hours trading (AHT) in 2022, so that traders can conduct inter-product trading strategies between other products or American depositary receipts (ADR) in the AHT session.

To enhance the trading security, efficiency and transparency of domestic OTC derivatives market, the TAIFEX launched the OTC central clearing service on July 25, 2022, and established rules and regulations aligning with international standards and catering to the market needs for robust risk management. TAIFEX also provided consultation to 11 financial institutions and helped them become clearing members of the OTC central clearing. TAIFEX becomes one of the few in the world developing an in-house OTC central clearing system containing key knowledge and system technology. In addition, TAIFEX obtained the third-country central counterparty (TC-CCP) recognition by the ESMA and the No-Action Relief granted from the US CFTC, greatly increasing the willingness of foreign participation in the domestic central clearing market and promoting the growth of the overall financial market. In terms of the exchange-traded derivatives clearing mechanisms, TAIFEX continuously make the clearing protocols conform to international standards. On February 18, 2022, it moved to the risk-based calculation method for clearing members' deposits to the clearing and settlement fund and adjusted the apportionment procedures in case of default by clearing members. On July 21, it revised the calculation method for the total amount of clearing and settlement fund to strengthen the safeguard system of domestic financial market and maintain the risk tolerance of the clearing and settlement fund.

Moreover, to respond to the government's public welfare policy on caring for the disadvantaged, TAIFEX has actively held various activities to put social care into practice, further achieving sustainability and fulfilling its social responsibility. In 2022, the trading volume in the Taiwan futures market has exceeded 300 million contracts for three consecutive years. TAIFEX will not stay complacent and will spare no efforts continuing to promote the growth of various businesses, leading Taiwan's futures market to a brighter future. The following is an overview of the development of the futures market in 2022.

2022年營運概況

一、市場概況

1. 市場參與概況

(1) 期貨市場參與者結構

在市場參與方面,截至2022年底止,專營期貨經紀商14家(30個營業據點)、兼營期貨經紀商13家(100個營業據點)、期貨交易輔助人則有43家(730個營業據點),期貨顧問事業33家,期貨經理事業5家,期貨信託事業9家。結算業務方面,結算會員為30家,其中一般結算會員20家、個別結算會員10家,另有結算銀行8家,其中1家為外資銀行。

(2) 交易資訊使用情形

截至2022年底,有106個交易資訊申請使用者與期交所簽訂交易資訊使用契約,包括23家資訊公司、41家期貨商及42家期貨交易輔助人;交易資訊亦於電視頻道播放,及於經濟日報、工商時報等報紙刊載主要商品交易行情。另有97家海外交易資訊授權使用者與期交所授權之海外交易資訊經銷商一德國交易所集團(Deutsche Börse Group)簽訂交易資訊使用契約(Market Data Dissemination Agreement)。

(3) 交易人開戶情形及交易人結構

截至2022年底,期貨市場開戶數累計近200萬戶,其中自然人開戶數為193萬9,161戶,法人開戶數 為11,092戶。在交易結構方面,自然人及法人參與市場比重各約48.47%及51.53%,其中外資法人 參與比重達31.21%。詳細資料請參考圖1及圖2。



30 TAIFEX Cares

圖1 臺灣期貨市場近20年總開戶數

Figure 1. Total account openings in Taiwan's futures market in the last 20 years

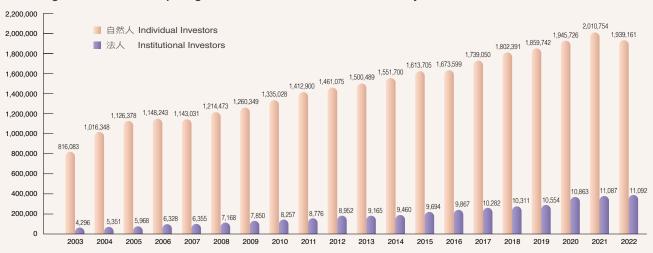


圖2 近20年臺灣期貨市場自然人及法人交易比重

Figure 2. Participation rate of individuals and institutions in Taiwan's futures market in the last 20 years



2022 Operations

I. Market Overview

1. Market Participation

(1) Market participation

As of the end of 2022, participants in Taiwan's futures market included 14 futures commission merchants (30 business locations), 13 concurrent futures commission merchants (100 locations), 43 introducing brokers (730 locations), 33 futures advisory enterprises, five managed futures enterprises, and night futures trust enterprises. On clearing side, there were 30 clearing members, of which 20 were general clearing members and 10 were individual clearing members. There were eight clearing banks, of which one was a foreign bank.

(2) Distribution of market data

As of the end of 2022, 106 information users have signed market data agreements with the TAIFEX, of which 23 were information companies, 41 were futures commission merchants and 42 were introducing brokers. The market data are also broadcast on TV channels and published in the *Economic Daily News, Commercial Times* and other major newspapers. In addition, TAIFEX has signed a Market Data Dissemination Agreement with Deutsche Börse Group, who is authorized to distribute TAIFEX's market data overseas, and there were 97 overseas licensed users and distributors outside Taiwan.

(3) Trading accounts and market structure

As of the end of 2022, the futures market had nearly 2 million trading accounts, of which 1,939,161 were of individuals and 11,092 were of institutions. In terms of market structure, participation rate of individuals and institutions were 48.47% and 51.53%, respectively. Foreign institutional participation accounted for 31.21%. Please refer to Figure 1 and 2 for details.

2. 市場交易概況

2022年我國期貨市場總交易量為3億8,446萬8,497口,較2021年的3億9,220萬2,371口,微幅減少 2%。日均量部分,2022年日均量為156萬2,880口,較2021年的160萬7,387口減少2.77%,市場總交 易量及日均量統計詳圖3。

期交所四大主力商品為:臺指選擇權交易量為2億74萬3,525口,占全市場交易量52%;臺股期 貨及小型臺指期貨交易量分別為4,313萬1,571口及8,017萬6,220口;股票期貨(含ETF期貨)為5,472萬 4,118口。

2. Overview of market trading volume

In 2022, the total trading volume of the Taiwan futures market was 384,468,497 contracts, a slight decrease of 2% compared with 392,202,371 contracts of 2021. The average daily volume of 1,562,880 contracts in 2022 was a decrease of 2.77% compared with 1,607,387 contracts in 2021. Please refer to Figure 3 for the total trading volume and the average daily volume.

Among the four main products of the TAIFEX: volume of TAIEX Options amounted to 200,743,525 contracts, accounting for about 52% of the total; volumes of TAIEX Futures and Mini-TAIEX Futures amounted to 43,131,571 contracts and 80,176,220 contracts, respectively. Volume of equity futures (including single stock futures and ETF futures) amounted to 54,724,118 contracts.

圖3 臺灣期貨市場近20年總交易量及日均量

Figure 3. Total trading volume and average daily trading volume of Taiwan's futures market in the last 20 years



二、重大業務項目執行情形

1. 新商品研究與開發

(1) 回應市場需求一推出具我國產業特色之類股期貨

期交所持續觀察現貨市場變化及期貨市場需求,2022年6月27日推出具我國產業特色之臺灣半導體 30期貨及航運期貨,提供交易人即時掌握交易避險機會,降低系統性風險,穩定資本市場,契約採 小型規模設計,降低參與門檻,充分實踐金融機構落實普惠金融精神。

(2) 優化既有商品一掛牌臺指選擇權及小型臺指期貨雙週到期契約

期交所觀察分析我國近月份選擇權交易狀況,及週選擇權掛牌以來交易量大幅增長,顯示交易人對 短天期契約具相當需求,於2022年11月9日推出臺指選擇權雙週到期契約,提供交易人不同天期交 易選擇,提升週選擇權到期轉倉彈性,並增加交易機會,滿足各式策略性交易需求。上市以來,整 體臺指選擇權日均量成長,顯示雙週選擇權推出有一加一大於二之效果。另同步推出契約乘數相同 之小型臺指期貨雙週到期契約,以利交易人對雙週選擇權進行評價。

II. Progress on Major Projects

1. New Products

(1) Sector Index Futures

TAIFEX observed changes in the cash market and responded to demands in the futures market by introducing Taiwan Semiconductor 30 Futures and Shipping and Transportation Sector Futures on 27 June 2022. These products reflect the domestic industry characteristics, and provide investors with trading and hedging opportunities, hereby reducing systematic risks. The small-sized contracts lower the trading threshold, catering to the market demand and further boosting financial inclusion into practice.

(2) Bi-weekly Contracts of TAIEX Options and Mini-TAIEX Futures

The active trading of TAIEX Options in spot month contracts and the surge of trading volume in TAIEX weekly contracts reflected considerable market demands for short-term contracts. On 9 November 2022, TAIFEX launched bi-weekly contracts of TAIEX Options to provide traders with more trading opportunities and flexibility with different duration of contracts, further meeting the needs of strategic trading. Since its launch, TAIEX Options has seen growth in the ADV, showing the benefits of introducing the bi-weekly options. In addition, TAIFEX simultaneously launched the bi-weekly contracts of Mini-TAIEX Futures with the same contract multiplier to help traders evaluate the price of bi-weekly options.

2. 新制度推出與制度改革

(1) 擴大動態價格穩定措施適用商品

為強化期貨市場價格穩定功能,並使期貨市場制度接軌國際,期交所自2018年建置動態價格穩定措施,先適用於國內股價指數期貨、2019年5月及10月適用於臺指選擇權及國外股價指數期貨、2020年6月適用於匯率類期貨及ETF期貨,2021年6月及12月適用於所有個股期貨及商品類期貨,2022年6月27日及11月7日陸續擴大動態價格穩定措施適用於電子、金融及ETF選擇權,半導體30期貨及航運期貨於上市當日亦同步納入動態價格穩定措施適用商品;目前期貨市場商品近99.9%交易量皆已適用動態價格穩定措施。

(2) 建置店頭集中結算機制

配合主管機關資本市場藍圖規劃,期交所於2022年7月25日建置我國店頭集中結算機制,提供新臺幣利率交換契約(IRS)結算會員自營交易自願性集中結算服務。訂定符合國際規範與業者需求之店頭集中結算制度規章,遵循國際CPSS-IOSCO金融市場基礎設施原則(Principles for Financial Market Infrastructures, PFMI),建立穩固風險管理機制;積極輔導11家金融機構成為結算會員,參與集中結算業務;並成為全球少數自建店頭結算系統之交易所,掌握我國金融關鍵知識與系統技術。完善我國金融基礎建設,維護市場穩定安全,並實現金融服務在地化,強化我國金融體系韌性。

目前期交所已獲我國金管會認可為合格集中結算交易對手(QCCP),使國內金融機構對期交所之交易 暴險最低僅須適用2%風險權數,可有效降低其資本計提,提升其資金運用效率。在國際QCCP資格 認可方面,更取得歐盟證券及市場管理局(ESMA)之第三國合格結算機構認可,並獲美國商品期貨交 易委員會(CFTC)核發監管豁免(No-Action Relief),大幅提升外資參與我國集中結算市場之意願,強 化我國結算機構之國際競爭力與市場地位。

(3) 其他新制度推出

在交易制度方面,2022年6月27日擴大夜盤商品類別至股票類,新增元大台灣50 ETF期貨為夜盤交易商品,提供ETF投資人更直接避險工具,以隨著國際市場變化機動調整部位,精準降低隔夜風險。在期貨集中交易市場結算制度方面,為使制度與國際更趨一致,參酌國際主要結算機構作法,2022年2月18日起調整期貨集中交易市場結算會員應繳存交割結算基金及市場發生違約時分擔金額之計算,採風險衡量方式,另於2022年7月21日起調整期貨集中交易市場交割結算基金總額計算方式,以強化期貨市場財務安全防衛資源對違約風險之承受能力。

2. New and Amended Measures

(1) Dynamic Price Banding Mechanism Applied to a Broader Range of Products

To strengthen the price stabilization in the futures markets and bring the futures market measures in line with international standards, TAIFEX introduced Dynamic Price Banding Mechanism (DPBM) in 2018 and first applied it to domestic equity index futures. The measure was then applied to TAIEX Options and foreign equity index futures in May and October 2019, FX and ETF Futures in June 2020, Single Stock Futures and commodity futures in June and December 2021, and expanded to Mini Electronics Sector Futures, Mini Finance Sector Futures and ETF Options on 27 June and 7 November 2022. Taiwan Semiconductor 30 Futures and Shipping and Transportation Sector Futures were also added to the DPBM on the day of launch. Currently, applicable products altogether cover close to 99.9% of the market's trading volume.

(2) Establishment of the Central Clearing Service for OTC Derivatives

To cooperate with the regulator's strategic planning for the capital market, TAIFEX established the OTC derivatives clearing on 25 July 2022, providing TWD interest rate swap (IRS) central clearing service for clearing members. TAIFEX develops OTC central clearing practices and regulations complying with international standards and meeting the needs of participants, and followed the Principles for Financial Market Infrastructures (PFMI) of the CPSS-IOSCO for robust risk management, and the Exchange also provided consultation to 11 financial institutions and helped them register as clearing members to participate in the central clearing business. TAIFEX becomes one of the few in the world which develops the OTC clearing system in-house and controls domestic financial key knowledge and system technology. The measure improves the domestic financial infrastructure to ensure market stability and security, and fulfill localization of financial services to strengthen the resilience of the domestic financial system.

TAIFEX has been recognized by FSC as a Qualifying Central Counterparty (QCCP), so that a risk weight of 2% can be applied to a financial institution's trade exposure to TAIFEX, which can effectively reduce their capital requirement and increase their capital efficiency. In addition, TAIFEX has also been recognized as the third-country central counterparty (TC-CCP) by the ESMA, and obtained the CFTC No-Action Relief, greatly increasing the willingness of foreign financial institutions' participation in the Taiwan's central clearing market and enhancing international competitiveness.

(3) Other New Measures

In trading measures, TAIFEX expanded the inclusion of night session to Single Stock Futures on 27 June 2022. Yuanta/P-shares Taiwan Top 50 ETF Futures was also added to the list, providing ETF investors with direct hedge instruments, so that they can dynamically adjust their positions according to the trends in the international market to precisely reduce their overnight trading risks. In exchange traded derivatives clearing measures, TAIFEX has referred to the practice of major international clearing institutions to conform to international standards. On 18 February 2022, the Exchange adopted the risk-based method to calculate the contribution to clearing and settlement fund of clearing members and the allocated amount to share in case of market default. On 21 July, TAIFEX also revised the calculation method for the total amount of clearing and settlement fund to strengthen the domestic financial waterfall scheme and maintain the risk tolerance against the market default.

3. 國際合作及交流

2022年上半年受全球疫情影響,期交所採線上方式積極參與國際會議,包括美國期貨業協會(FIA)、世界交易所聯合會(WFE)與期貨市場協會(AFM)等國際組織會議,並於2022年9月29日與FIA共同辦理主題為「亞太區市場跨境交易與執行」之線上研討會(FIA Webinar),邀集臺灣、美國及新加坡等地交易所及業界代表共同探討亞太期貨市場發展之機遇與挑戰,吸引國內外業界人士踴躍參與。下半年我國逐漸放寬邊境管制,期交所亦於10月與11月分別出席國際證券管理機構組織 (IOSCO)年會以及FIA亞洲分會(FIA Asia)年會,了解國際期貨市場重要議題及發展趨勢,並與國外交易所面對面洽談合作機會。

國際合作方面,2022年10月28日與證基會共同主辦「2022美國CFTC衍生性商品監理新趨勢研討會」,邀請美國商品期貨交易委員會(CFTC)國際事務部門副主管Kevin C. Piccoli講授「面對氣候變遷,CFTC之監理機制與風險管理」,除我國主管機關、期貨業、金融機構及週邊單位外,並邀請泰國及越南主管機關參加,與會人數逾120人,強化我國期貨市場與國際連結,並促進臺美監理合作交流。另與德國交易所集團(Deutsche Börse Group)合作海外行銷行情資訊,推廣成效良好,簽約使用交易資訊之海外公司家數由2021年86家增加至2022年97家(包括9家資訊公司、88家投資機構),持續擴展期貨行情資訊海外業務,促進外資參與我國期貨市場。國際行銷方面,期交所與外資機構及國際交易所進行線上會談,並適時發送英文新聞稿及每月英文新聞信予外資機構,亦藉由當前經濟發展及國際趨勢,於國際媒體發表專文,加強行銷新商品新制度,包括於Traders Magazine、The Asset及The Trade等刊載專文或專欄特稿,提升我國期貨市場國際能見度。

3. International Cooperation and Exchange

Despite the pandemic, TAIFEX still actively participated in various online conferences held by the Futures Industry Association (FIA), the World Federation of Exchanges (WFE) and the Association of Futures Markets (AFM), and partnered with FIA to hold a webinar on cross-border trading and execution in the Asia-Pacific market on 29 September 2022. The webinar has gathered experts from exchanges and the financial industry in Taiwan, the US, Singapore and other countries to discuss opportunities and challenges in the development of Asia-Pacific futures market, and drew active participation from domestic and abroad. In the second half of the year, when Taiwan gradually lifted the border restrictions, TAIFEX attended the annual conferences of the International Organization of Securities Commissions (IOSCO) and the FIA Asia in October and November, separately, to keep abreast of development trends in the global futures market and deepen partnership and collaboration with foreign exchanges.

In the area of international cooperation, TAIFEX and the Securities and Futures Institute (SFI) jointly organized a seminar with the US Commodity Futures Trading Commission (CFTC) on 28 October 2022 with the topics of CFTC's supervisory measures and risk management amid climate change. In addition to the domestic financial institutions, TAIFEX also invited the regulators from Thailand and Vietnam to attend. The seminar was attended by over 120 people, strengthening the connection between the domestic futures market and the international markets, and promoting the Taiwan-US supervisory cooperation. In addition, TAIFEX continued to partner with Deutsche Börse Group for the overseas marketing and distribution of market data. This partnership has yielded fruitful results and increased the number of foreign firms contracting to use TAIFEX's market data from 86 in 2021 to 97 in 2022, including nine information vendors and 88 investment institutions. The efforts aim to expand the overseas reach of the Exchange's market data and encourage foreign participation. In international marketing and promotions, TAIFEX takes part in online meeting with foreign institutions and international exchanges, and timely issues English press releases and monthly newsletters. The Exchange also promotes its new products and measures by publishing articles or op-advertorials in international media including Traders Magazine, The Asset, and The Trade, helping to increase TAIFEX's global exposure.

4. 市場宣導及推廣

2022年於新商品上市及新制度上線前,舉辦16場線上宣導説明會,吸引約650位從業人員及交易人參加,並錄製影片上架至期交所YouTube官方頻道及期貨影音知識網,有效推廣新商品半導體30期貨、航運期貨、臺指選擇權及小型臺指期貨雙週到期契約,以及ETF期貨納入夜盤交易、電子及金融選擇權、ETF選擇權適用動態價格穩定措施等新制度。同時建置中英文宣導專區、編印海報及摺頁文宣等相關文宣,方便交易人及業者了解期貨市場最新動態;持續出版「期貨與選擇權學刊」,發送全國期貨商、大專院校財金系所及相關學術單位圖書館等。此外,為強化期貨知識及業務宣導,出版「臺灣期貨雙月刊」電子書,以擴大閱覽人次及宣傳效果。在媒體宣傳方面,持續於主要財經平面媒體開闢期貨專版,刊登期貨市場最新動態,並採系列報導介紹期貨市場新商品、新制度或制度調整;藉由財經電視台報導期貨市場最新動態及相關行情資訊,建立良好資訊傳遞平台。另與媒體合作製播網路節目及辦理實體及線上座談會或論壇,並透過媒體臉書、YouTube、APP推播及其他網路平台露出,透過整合性曝光強化推廣效益。

在教育宣導方面,期交所教育宣導對象遍及社會大眾、大專院校學生及期貨從業人員。除於台北免費開辦36堂線上直播「交易人期貨及選擇權課程」,吸引逾1,200位交易人參與,並於雙北以外地區辦理「期貨與選擇權宣導講座」,更特別安排樂齡族群可優先開放報名6堂「認識期貨市場與商品」課程,受課人數逾700人。在期貨專業人才培育方面,辦理「期貨專業知識及人才培訓班」、「期貨資產管理人員培訓班」及「期貨市場法人機構從業人員培訓課程」,及每月於期交所「期貨交易教育中心」辦理期貨業從業人員課程,以強化培育期貨人才。此外,為提高金融科技教育便利性及效率,推廣及鼓勵社會大眾透過期交所「期貨影音知識網」、「期貨與選擇權數位學習網」及「虛擬交易所」進行線上學習及模擬交易。

在校園知識推廣方面,為增進年輕人期貨知識及建立風險控管觀念,與政治大學創新國際學院合作開設「年輕人須具備的期貨知識」通識課程;與媒體合作舉辦「期貨與選擇權論文徵集活動」及「期貨學術與實務交流研討會」、「從校園到職場一與期貨共創Future」期貨講座暨校園徵才活動(國立中正大學、國立臺北商業大學各1場次);針對推廣「虛擬交易所」舉辦兩階段「縱橫期海 Trader就是你一大專院校模擬交易競賽」,由全國大專院校學生組隊、指導老師推薦報名參賽,共吸引600隊、逾2千位學生組隊參賽。另鑑於近年金融詐騙案件頻傳,詐騙手法不斷推陳出新,為讓民眾瞭解金融詐騙手法及強化防範詐騙風險意識,期交所配合主管機關推動「防範金融投資詐騙精進措施及加強教育宣導」,並與證交所、櫃買中心及集保結算所等證券期貨周邊單位共同辦理「防範金融投資詐騙系列宣導活動」,並於官網建置「期貨反詐騙宣導專區」,另配合於期交所一般交易人課程、期貨業從業人員課程、新商品與新制度宣導説明會、期貨與選擇權宣導講座、「大專院校模擬交易競賽」校園宣導講座及期貨市場法人機構從業人員培訓課程等活動中加強金融安全宣導。

在法人推廣方面,2022年針對上市櫃公司董監事辦理公司治理研討會1場次及法人機構從業人員辦理培訓課程5場次,推廣普及之法人參與人數逾250人次。此外,聯繫20家次法人機構及舉辦第8屆「期貨鑽石獎」,有效提升法人對臺灣期貨市場之認識,並促進法人運用期貨與選擇權避險增益,近6年期貨市場新增703家法人機構參與,其中2022年銀行、保險、投信業等金融業法人日均量較2017至2021年成長9.66%,成功推升法人機構參與我國期貨市場。此外,持續針對造市者、期貨業者、法人機構辦理多項報價獎勵及交易獎勵活動,以推動臺灣期貨市場成長;為充分了解期貨業者意見,除定期拜訪業者,並舉辦2場次「期貨商負責人座談會」,邀請各期貨商及證券商經營期貨交易輔助業務之總公司負責人及分公司經理人,就期貨市場各項業務充分進行交換意見,並將其建議納入未來市場推廣與業務發展規劃之重要參考。



4. Market Education and Promotions

In 2022, TAIFEX held 16 online educational seminars for new products and measures that attracted a total of about 650 participants. The videos were uploaded to the TAIFEX's official YouTube channel and educational website. The materials effectively promoted new products such as Taiwan Semiconductor 30 Futures, Shipping and Transportation Sector Futures and Bi-weekly contracts of TAIEX Options and Mini-TAIEX Futures, as well as the addition of ETF Futures to night trading session, and the application of DPBM to Electronics Sector Index Options, Finance Sector Index Options and ETF Options. Information is made available in both Chinese and English to be put on the official website. There are also posters and brochures provided to help traders and industry participants understand the latest developments in the futures market. TAIFEX continued to publish the *Journal of Futures and Option*, and sent it to FCMs, financial departments of college and universities as well as related academic institutes across the country. TAIFEX also published electronic edition of *TAIFEX Bimonthly* to expand the readership and the effectiveness of promotion. In media marketing, TAIFEX publishes columns addressing the latest market developments in Taiwan's major financial dailies, as well as serialized reports on new products and new or amended measures. In addition, the Exchange disseminated market data and updates on TV, and partners with media to produce programs and organize seminars offering financial commentary with exposures on Facebook, YouTube and other online platforms.

In terms of education and promotion, TAIFEX expands its reach to the general public, university and college students and futures market participants. In addition to 36 free courses on futures and options in Taipei which attracted over 1,200 people, the Exchange also organized promotional seminars outside of Taipei, as well as six introductory sessions about futures market and products that prioritized the participation of senior citizens with a total of 700 people participated. TAIFEX also provides various classes to futures industry personnel for furthering professional development. The establishing of a dedicated website for learning futures and simulated trading improved the convenience and efficiency of Fintech education, and helps to increase the public's understanding of futures.

In the area of knowledge promotion in campus, TAIFEX collaborated with the International College of Innovation of National Chengchi University to offer a general course about futures knowledge to improve young people's understanding of futures and risk management. TAIFEX also collaborated with the media to organize call for paper on futures and options, academia and industry exchange seminars, and held the recruiting events at National Chung Cheng University and National Taipei University of Business, as well as hosted the two-phased virtual trading competition for college students and attracting the participation of over 2,000 students. In view of the frequent financial fraud incidents in recent years and the ever-changing methods used to conduct fraudulent activities, TAIFEX has cooperated with the regulator to promote education on avoidance of sophisticated financial schemes to help the general public develop more awareness of financial frauds. The Exchange also co-organizes promotional activities on prevention of financial investment frauds with the TWSE, TPEx, TDCC and other related organizations, and established the column of anti-fraud promotion on the official website, as well as strengthen financial security during the courses and seminars.

In the area of institutional promotions, TAIFEX held one conference on corporate governance for the directors and supervisors of listed companies, as well as five training sessions for futures industry personnel, attracting a total of 250 participants. In addition to connecting with 20 institutions, TAIFEX organized the

Eighth Diamond Awards, enhancing the institutions' understanding of Taiwan futures market and encouraging institutions to trade and hedge by using futures and options. With these efforts, a total of 703 new institutions participated in the market over the last six years. In addition, TAIFEX provides quotation and trading incentives for market makers, FCMs and institution investors to promote the growth of Taiwan's futures market. TAIFEX also regularly visits futures companies and held two meetings with the managing director of FCMs to fully exchange opinions on various practices in the futures market, taking their suggestions into account in the future plans.

5. 對期貨商、結算會員及交易資訊申請使用者管理

- (1) 為強化期貨商資通安全防護機制,協助主管機關推動金融資安行動方案,與周邊單位共同研訂「資通系統安全防護基準」、「網路安全防護基準」、「供應鏈風險管理」、「新興科技」及「作業韌性」等五項資安相關參考指引,並協助期貨公會研訂「新興科技資訊安全自律規範」、「資通系統安全防護基準」、「網路安全防護基準」、「供應鏈風險管理」等四項自律規範。
- (2) 為防範期貨商遭受網路駭客撞庫攻擊,強化期貨商外部連線資安管控措施,修訂「建立期貨商資通安全檢查機制」,針對第一至三級期貨商應建置資通安全威脅偵測等各項防禦機制,並輔導第四級期貨商提前導入IPS及WAF二項網路資安防護機制;另積極輔導期貨商完成網路下單雙因子認證防護機制,健全資安防護能量。
- (3) 為有效防禦駭客撞庫攻擊偽冒下單,建立期貨商偵測網路駭客入侵預警機制,修訂「期貨商內部控制制度標準規範」,新增客戶申請或更新憑證下載必須採多因子驗證客戶身分、建置客戶帳號登入或異常態樣通知、異常IP登入監控與預警、密碼使用未遭破解之演算法產生亂碼加密儲存、客戶忘記密碼或密碼錯誤遭鎖定帳戶處理等規定。
- (4) 為維持期貨商營運服務不中斷,修正「期貨商因應嚴重特殊傳染性肺炎(COVID-19)事件申請居家辦公指引」及「建立期貨商資通安全檢查機制」等強化監理措施;另修訂「期貨商內部控制制度標準規範」,增加期貨商應評估遠端遙控軟體之安全性,並透過防火牆或遠端軟體之控管,採限制連線來源IP位址及加密方式進行連線、委外廠商之人員如因作業獲核准後始得連線且均由側錄系統錄影以留存相關操作紀錄等規定。
- (5) 為執行主管機關「證券期貨業永續發展轉型執行策略」,強化期貨商資通安全措施,修訂「期貨商內部控制制度標準規範」,訂定期貨商應配置適當資安人員及要求資安人員應取得專業證照, 另規範期貨商應建置網路威脅偵測管理機制,以監控網路異常活動。
- (6) 為強化期貨商防制洗錢及打擊資恐控管能力,輔導業者落實執行相關作業,以「防制洗錢及打擊 資恐缺失案例分享」為專題,併同年度期貨商及期貨交易輔助人內部控制制度標準規範修正,辦 理14場次線上宣導説明會,包括期貨商及期貨交易輔助人稽核主管、法令遵循主管、防制洗錢專

責主管及從業人員共1,312人參加。另為有效執行專營期貨商洗錢及資恐專案查核,採行以風險 基礎為導向查核機制,透過專案查核與例行查核專營期貨商、覆核期貨商申報改善情形等輔導措施,督促業者確實改善期交所查核所見缺失及覆核建議改善事項。

- (7) 為提升期貨交易人申請變更開戶資料便利性,放寬期貨商及期貨交易輔助人得跨營業據點受理期 貨交易人於營業場所申請變更開戶資料作業,並配合修訂期貨商及期貨交易輔助人內部控制制度 標準規範,有助提升期貨商作業效能、降低營運成本。
- (8) 為因應數位金融之發展,提升期貨商整體數位化服務,研訂「期貨商受理通信或電子化方式開戶應行注意事項」,期貨商得以自然人憑證、銀行帳戶或晶片金融卡等多元數位方式確認交易人身分,另開放特定法人得採通信或電子化方式辦理開戶,及交易人得以自然人憑證輔以視訊方式申請放寬保證金使用額度等規範。
- (9) 有關交易資訊申請使用者管理方面,為強化交易資訊使用管理,積極查核資訊公司機房共23家次,資訊使用情況共5家次,以防範資訊之非法使用。

5. Supervision of FCMs, Clearing Members, and Market Data Users

- (1) To strengthen the cybersecurity protection of FCMs and help the regulator promote the Financial Cyber Security Action Plan, TAIFEX and other securities and futures related organizations jointly developed five reference guidelines related to information security, covering topics such as "Information system security protection standard,""Network security protection standard,""Supply chain risk management, ""Emerging technology" and "Operation resilience." The exchange also assisted CNFA in formulating four self-regulatory standards, covering topics such as "Self-regulation on information security of emerging technology,""Information system security protection standard,""Network security protection standard" and "Supply chain risk management."
- (2) To prevent FCMs from credential stuffing cyber-attacks, TAIFEX amended the "Establishment of an Information and Communications Security Inspection System for Futures Commission Merchants" to reinforce merchants' information security control measures for external connection. The Exchange helped Level 1 to Level 3 FCMs build various defense measures such as threat detection, and provided consultation to Level 4 merchants, so that they could incorporate IPS and WAF network information security protection measures. TAIFEX also actively helped the merchants complete their one or two-factor authentication protection measures for online orders, further improving their information security capacity.
- (3) To effectively prevent fraudulent orders from hackers conducting credential stuffing and help FCMs establish early warning measures to detect hackers attacks, TAIFEX amended the Standards for the Internal Control Systems of Futures Commission Merchants, which added rules such as multi-factor verification of identity of customers applying for or updating certificate downloads, notifications for

- customer account login or abnormal patterns, monitoring and early warning for abnormal IP login, uncracked algorithm generating garbled encryption to store passwords, handling of customers who forget password or locked accounts due to incorrect password input, etc.
- (4) To maintain the uninterrupted operation and services of FCMs, TAIFEX amended the "Guidelines to Futures Commission Merchants Applying for Work From Home In Response to COVID-19" and the "Establishment of an Information and Communications Security Inspection System for Futures Commission Merchants" to reinforce supervision. The "Standards for the Internal Control Systems of Futures Commission Merchants" were also amended to require FCMs to assess security of remote control software, including using firewall or remote software to control source IP address and encrypt connection, and requiring the session recording for records of operations of contractor personnel who are granted access for performing their tasks.
- (5) To implement the transition strategies of sustainable development for securities and futures industry introduced by the regulator, and strengthen cybersecurity measures of FCMs, TAIFEX amended the "Standards for the Internal Control Systems of Futures Commission Merchants," stipulating that FCMs should allocate appropriate information security personnel and request them to obtain professional certificates, and should establish network threat detection and management measures to monitor abnormal network activities.
- (6) To strengthen FCMs¹ capability and implementation of anti-money laundering and countering the financing of terrorism (AML/CFT), TAIFEX organized 14 online seminars addressing cases of deficiencies in AML/CFT. A total of 1,312 participants, including auditors, compliance and AML/CFT managers from FCMs and IBs attended. To effectively implement the audit of AML/CFT of specialized FCMs, risk-based audit practices were adopted, and guidance measures were conducted to audit the merchants by project or routine visits and offer recommendations for improvement, and operators were urged to improve on their deficiencies based on the audit and review.
- (7) To improve the convenience for traders to apply for amendment of account information, FCMs and IBs were allowed to accept traders' request across different business locations. TAIFEX also amended relevant internal control standards for FCMs and IBs to help them improve the operating efficiency and reduce operating costs.
- (8) In response to the development of digital finance and in order to improve the overall digital services of FCMs, TAIFEX introduced the rule which allows FCMs to verify the identity of individual traders by Citizen Digital Certificate, bank account, chip card or other digital methods. Specific legal entities are allowed to apply for opening accounts electronically, and individual traders may use Citizen Digital Certificate and teleconferencing to apply for loosening the margin requirement.
- (9) To reinforce the management of market data users, TAIFEX audited the data centers for 23 times, and data usage for 5 times to prevent illegal usage of market data.

6. 市場監理

為維護期貨市場交易秩序、防範市場操縱及偵測有無異常交易行為,就市場重大資訊進行蒐集檢視,並對期貨交易人及期貨商交易情形,依價格變動、委託量、成交量、未沖銷量變化及集中度等狀況進行監控與分析,並有效執行各商品相關部位限制規範。

每日盤後召開跨部門會議,掌握高風險交易人及期貨商權益變化狀況,並於必要時通知相關期貨商及結算會員注意,以強化市場風險控管,防範期貨市場鉅額違約之發生。另配合新商品、新制度推出,檢討並修訂相關監視規範,調整監視系統功能,持續強化監視系統自動化及線上監視功能。另自2021年5月份起因國內新冠肺炎疫情嚴峻,造成證券與期貨市場行情劇烈波動,期交所即每日定時提供主管機關市場行情資訊及期貨商代沖銷情形,另於收盤後針對國內外期貨市場最新行情及當日期貨市場交易概況,撰擬期貨市場分析説明,俾利主管機關即時掌握國內外期貨市場行情波動與最新動態,做為因應決策之參考,以確保國內期貨市場安全與穩定。此外,為維護跨市場交易秩序與安全,提升跨市場不法交易通報及查核機制,主動加強交易人異常交易行為檢視作業,針對特定交易情事或交易人有影響市場秩序之虞者,與周邊單位進行跨市場通報及資訊互換,並主辦2022年證券暨期貨跨市場監視研討會,促進跨市場監理經驗交流,共同維護現貨及期貨市場交易秩序。

6. Market Surveillance

To maintain market soundness, prevent market manipulation and detect abnormal trading behaviors, TAIFEX gathers and analyzes market data, implements position-limit measures as well as monitors and analyzes price fluctuations, order sizes, trading volumes, changes in open interest, and position concentrations.

TAIFEX holds daily interdepartmental meeting after market close to track fluctuations in FCMs' and highrisk-traders' equity. TAIFEX advises relevant FCMs and clearing members of these fluctuations as necessary to strengthen the market's risk controls and prevent large-scale defaults. In addition, in conjunction with the launch of new products and measures, TAIFEX evaluates and amends relevant surveillance standards, extended the capabilities of its computing systems, and continues to enhance the online-monitoring capabilities of its surveillance systems. With the pandemic causing dramatic fluctuations in the domestic securities and futures markets, TAIFEX has provided information on market data and on FCMs' offset of positions on behalf of a principal to the regulator on a daily basis since May 2021. The Exchange has also produced an aftermarket analysis of the latest foreign and domestic futures market conditions with a daily trading summary. These reports have kept the regulator aware of market movements on a timely basis, and served as a reference for their decision making, helping to ensure the market's security and stability. To maintain the orderliness and security of cross-market trading and improve the associated reporting and audit practices, TAIFEX has proactively strengthened the inspection of abnormal trading behaviors. TAIFEX engages in cross-market reporting and information exchanges regarding specific trading issues and traders with securities and futures related organizations. TAIFEX also organized the 2022 Securities and Futures Cross-Market Monitoring Seminar to share experience with industry practitioners to jointly maintain the order of the spot and futures market.

7. 電腦作業

為使電腦系統滿足市場需求、因應業務成長,辦理系統容量擴充及系統效能提升相關作業:

- (1) 在配合交易、結算及資訊業務需求方面:配合新商品及新制度或制度調整,持續進行電腦系統功能開發。包含:完成半導體30期貨上市、航運期貨上市、電子及金融選擇權適用動態價格穩定措施、ETF期貨納入夜盤交易、臺指選擇權契約暨小型臺指期貨契約掛牌雙週到期契約等功能。
- (2) 在強化交易系統方面:完成新交易系統上線作業,新交易系統採用新的作業系統平台,引進新機型硬體與高速固態硬碟,並同步優化交易系統架構,進行系統效能調校,有效提升交易系統運作效能及容量,提升市場服務品質。另藉由汰換屆臨使用年限之電腦設備,亦可降低系統故障風險,搭配作業系統版本升級,使相關軟硬體可持續獲得原廠充足之人力與技術支援,以確保系統運作安全及維護體系之運作。
- (3) 在提供市場服務方面:為強化期貨商交易下單備援機制,縮減期貨商因不可抗力因素,致資訊系統 故障無法下單交易中斷時間,持續針對期貨商雲端備援輸單系統操作介面進行調整,並依照期貨商 建議新增功能,大幅提升期貨商使用備援系統便利性。截至2022年底,建置期貨商雲端備援主機 共95台,同時藉由簡化期貨商使用雲端備援終端機之開通流程,加速期貨商申請及雲端備援終端機 操作速度。配合周邊單位資訊傳輸整合網路,持續與3家電信公司共同檢視網路及頻寬設定,以確 保網路服務品質符合市場需求。
- (4) 在提供建置雲端交易系統測試環境方面:於網際網路建立安全通道進行交易及行情傳輸測試,以提供業者更為便利、安全與低成本開發測試環境。
- (5) 在強化資通安全管理方面:依國內資通安全管理法及主管機關資通安全政策推動「金融資安行動方案」、「資本市場藍圖」及「資通系統籌獲各階段資安強化措施」之指示項目,持續研議強化期貨市場整體資通安全防護機制及資訊服務委外安全管理作業。另為落實執行資安管理法令遵循作業,積極推動資訊安全管理系統申請符合國際規範且通過本國標準法主管機關委託機構認證之機構「財團法人全國認證基金會」認證標誌(TAF),已於2022年12月21日正式取得ISO 27001:2013+TAF國際標準驗證證書,並持續強化維運資安監控中心(SOC)作業,2022年度並配合主管機關完成證券期貨領域各項資安檢測及演練包含:「分散式阻斷服務攻擊(DDoS)應變演練」、「證券期貨周邊單位交易網路及交易相關系統資通安全仿真演練」、「金融資安入侵模擬演練」、「金融重大資安事件應變情境演練」、「金融重大資安事件通報演練」、「社交工程聯合演練」,並持續不定期辦理員工資安意識教育訓練。此外,依照資通安全防護基準定期辦理入侵偵測、弱點掃描、資安健診、系統備援及資安事件通報演練作業等,及維護期貨核心業務營運持續管理系統(BCMS)與通過ISO22301:2019每年後續審查驗證,不斷提升資通安全機制及資訊作業品質。

(6) 店頭衍生性商品集中結算系統方面:於2022年7月25日推出新臺幣利率交換契約(IRS)結算會員 自營交易之自願性集中結算,系統以自主開發模式建置,除提高對系統自我掌控能力,並大幅降低 建置成本,成為全球少數自建店頭結算系統之交易所,提供我國店頭衍生性商品交易可在國內集中 結算之環境,有利金融機構參與及維護整體市場安全。

7. IT Operations

TAIFEX expanded and upgraded computing systems as follows to meet the market needs:

- (1) TAIFEX continues to extend capabilities of its computing systems to accommodate for the rollout of new products and measures. In 2022, these included the launch of Taiwan Semiconductor 30 Futures and Shipping and Transportation Sector Futures, the application of DPBM to Electronics Sector Index Options, Finance Sector Index Options and ETF Options. ETF Futures being added to the night trading session, and the listing of Bi-weekly contracts of TAIEX Options and Mini-TAIEX Futures.
- (2) To strengthen the trading system, TAIFEX launched the new trading system which adopted a new operating system platform and incorporated the use of new models of hardware and high-speed solid state drives, and simultaneously optimized the trading system structure and adjusted system performance to effectively improve the operational efficiency and capacity and improve the service quality. The replacement of computer equipment that is near the end of its service life can also reduce the risk of system failure. With the edition upgrade of the operating system, the relevant software and hardware can continue to receive sufficient manpower and technical support, further ensuring the safe operation of the system.
- (3) In the area of market services, TAIFEX has strengthened its backup futures-trading mechanism and reduced the duration of trading interruptions resulted from force-majeure events that crash FCMs' computing systems by continuing to adjust the interface through which FCMs utilize cloud-based backup terminals. TAIFEX also makes the backup system easier to use by adding new functions recommended by FCMs. As of the end of 2022, a total of 95 cloud-based backup servers have been installed. At the same time, TAIFEX simplified the process for FCMs to access cloud-based backup terminals, accelerated the process of FCMs' application, and increased the operation speed of the backup terminals. TAIFEX also supports the integration of securities and futures related organizations' data-transmission networks, and ensures the quality of network services by continuing to work with three telecom companies to monitor internet and broadband installations.
- (4) In the area of cloud-based testing environment for trading system, TAIFEX establishes secure internet connections to provide member firms with a safe, convenient, and low-cost testing environment.
- (5) In the area of reinforcing cybersecurity management, based on the Cyber Security Management Act and the cybersecurity policies introduced by the regulator TAIFEX implements cybersecurity measures and continues to study means of strengthening the overall IT-security of the futures market, and of

outsourcing the security management of information services. To comply with information security management regulations, TAIFEX actively promotes the compliance of its information security management system with international standards and the certification by the Taiwan Accreditation Foundation (TAF). The ISO 27001:2013+TAF international standard verification certificate was officially obtained on 21 December 2022, and TAIFEX continued to reinforce its Security Operations Center (SOC). In 2022, TAIFEX completed various information security inspection and drills, which cover the rehearsed responses to Distributed Denial of Service (DDoS) attacks, conducted information security training with securities and futures related organizations, and held employee information security awareness education and training from time to time. In addition, TAIFEX regularly conducts intrusion detection, vulnerability scanning, information security health diagnosis, system backup exercises and information security incident notification drills. The Exchange also maintains the business continuity management system (BCMS) and passes the annual follow-up review and verification of ISO 22301:2019 to strengthen the information security mechanisms and the quality of IT operations.

(6) In the area of OTC derivatives clearing system, TAIFEX introduced the TWD interest rate swap (IRS) central clearing service for clearing members on 25 July 2022. The OTC derivatives clearing system is self-developed, which has improved control capabilities over the system and greatly reduced construction costs. TAIFEX becomes one of the few in the world that developed an OTC clearing system in-house, further facilitating financial institutions' participation and maintaining the stability and security of the overall financial market.

8. 內部稽核

除對各部門自行評估報告加以覆核,並依年度稽核計畫,就交易、結算、監視、期貨商輔導、資訊、企劃、內部管理、資通安全、檢舉制度及金融檢查報告等作業進行查核,並將查核結果,按月交付各監察人查閱,及按季提陳董事會並陳報主管機關。

8. Internal Audit

TAIFEX reviews the self-assessment reports submitted by each department, and evaluated operations of trading, clearing, surveillance, intermediaries compliance and service, IT, business development, internal management, IT-security, grievance filing and financial inspection report in accordance with the annual audit plan. The results are submitted to the supervisors for review every month, and reported to the board of directors and the regulator on a quarterly basis.