

# Derivatives Markets in Emerging Countries

**ICSA Emerging Markets Committee** 

# DERIVATIVES MARKETS IN EMERGING COUNTRIES

Derivatives are an important class of financial instruments which offer various types of risk production and allow innovative investment strategies. They are important risk management tools to manage the exposure to interest rate, currency, commodity price or other risks. This permits investors to lend and invest funds with confidence. Derivatives can be also used for investment and arbitrage purposes. They allow investors to trade on future price expectations.

The market can be divided into two; exchange traded derivatives and over the counter (OTC) derivatives. With the help of technology and financial innovation, the market has experienced an impressive growth in the last decade. According the Bank for International Settlement Statistics, notional outstanding amount of over-the-counter derivatives climbed to US\$ 1,356 trillion in 2011. Nearly 85% of the world's outstanding derivatives are traded on OTC markets. OTC derivatives often comprise privately negotiated contracts, where only the participants have detailed information. Main market participants are professionals, including banks, investment firms, insurance companies and corporations.

Besides its importance, there are some risks associated with the derivatives market. First of all, just as there is a huge potential of earning higher returns, it also exposes investors to losses. Some derivatives, especially in the OTC market, expose investors to counterparty risks. In fact, the financial crisis has revealed many weaknesses of OTC derivatives in terms of their transparency and counter party risks etc. Moreover, the crisis has demonstrated the potential for contagion arising from limited transparency of counterparty relationships in the OTC derivatives market. In reaction to financial crisis, many policy makers and regulators took initiatives or proposed strengthening regulation to increase transparency and safety in the local derivatives markets.

In 2009, G-20 leaders agreed that all standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms. By the end of 2012, at the latest, these transactions should be cleared through central counterparties; otherwise, they should be subject to higher capital requirements. They also committed that all OTC derivative contracts should be reported to trade repositories. These changes are set to improve the efficiency and transparency of the OTC derivatives markets with a view to reducing the inherent counterparty and operational risks, as well as overall systemic risks. G-20 asked the Financial Stability Board (FSB) to assess the implementation of these measures regularly.

In 2010, with the initiative of FSB, a working group was formed to follow the implementation of G-20 objectives. The group consists of the Committee on Payment and Settlement Systems (CPSS), the International Organization of Securities Commissions (IOSCO) and the European Commission representatives. The focus of the group is to strengthen standards for OTC derivatives. The group sets recommendations addressing the implementation of G-20 objectives and issues progress reports. IOSCO and CPSS formed own task forces and adapted reports that addressed these recommendations. Besides, initial proposals regarding the derivatives market (both exchange-traded and OTC) regulation have been initiated at the national level.

#### **MANDATE**

Considering the importance of the derivatives for the financial markets, and recent regulations that have been taking shape (at both international and national levels), ICSA Emerging Markets Committee decided to work on the development of the derivatives market in emerging markets. During the Interim Meeting of ICSA on December 5, 2011, ICSA members approved the ICSA EMC's proposal. The ICSA EMC is composed of the following members.

- 1. Association of Capital Market Intermediary Institutions of Turkey (TSPAKB)
- 2. Asociación Mexicana de Intermediarios Bursátiles (AMIB)
- 3. Association of Thai Securities Companies (ASCO)
- 4. Brazilian Financial and Capital Markets Association (ANBIMA)
- 5. Bulgarian Association of Licensed Investment Intermediaries (BALII)
- 6. Chinese Taiwan Securities Association (CTSA)
- 7. Korea Financial Investment Association (KOFIA)

#### **EXECUTIVE SUMMARY**

This report focuses on the structure and characteristics of the derivatives markets in Brazil, Bulgaria, Korea, Mexico, Thailand and Turkey. Major findings and policy recommendations are summarized in this section, while individual country reports are presented in the following pages.

### **Regulatory Framework**

The regulatory structure in these six countries is broadly similar, although differences exist in details. Generally speaking, the main regulator of the capital markets regulates the derivatives market, in particular exchange-traded derivatives. SROs are effective in terms of post-trade transparency, especially in the OTC markets.

In one of the countries, only a few types of derivative instruments are defined in the legislation, whereas in others, the definition of derivatives has a wider coverage. Exchange traded derivatives are created by the exchange where transactions take place. Other derivative products, such as warrants, may be issued by financial companies. By and large, OTC derivatives are negotiated between financial companies.

#### **Size of the Derivatives Markets**

The size of the derivatives markets in Korea and Brazil are fairly larger than in other countries. In both countries, OTC trading volume is smaller than the exchange-traded volume. However, in Mexico, the OTC trading volume is higher than exchange trading. The derivatives market in Bulgaria is at its initial stage of development.

# **Settlement and Custody**

Generally, exchange-traded derivatives are settled by national central settlement companies. On the other hand, there are no guarantees (apart from those voluntarily agreed upon bilaterally) for the settlement of OTC transactions. Korea is now preparing to introduce a CCP for OTC derivatives, while in Brazil some OTC derivatives can be settled through the CCP arrangements. Mexico has also been working on introducing post-trading services for OTC derivatives.

# **Disclosure Requirements**

The intermediary institutions should disclose the post trading (both in exchange-traded and OTC market) information in Korea, Brazil, Mexico and Bulgaria. Generally, the intermediary institutions have to notify their clients with respect to risks of these transactions. In the case of Mexico, the financial institutions are required to establish guidelines and policies to identify the investment objectives of their customers.

#### Role of SROs

SROs might have various roles in the derivatives market. First of all, SROs are supervising their members' compliance with the code of conduct and ethical rules, including their activities in the derivatives market.

SROs also ensure that investors, who will engage in derivatives market, are aware of their investment risks. Given the nature of derivatives trading, regulations require that intermediary institutions should offer an explanatory note to investors. Generally, the content of these notes are defined by the SROs. In the case of Korea, retail investors are required to take a training course, approved by KOFIA, before they start investing in certain types of derivatives. In Brazil, the entities governing the organized exchange or OTC markets have to perform SRO duties defined by specific legislation.

#### POLICY RECOMMENDATIONS

The following measures are recommended for the development of the derivatives markets in emerging countries.

- Emerging derivatives markets are at different stages of development and different levels of sophistication. It is observed that better regulated markets are more developed than others, because investors and market players need clear-cut rules and regulations.
- 2. The diversity of derivative instruments is generally low in emerging markets. In some jurisdictions, regulations restrict the types of the derivatives that can be offered. These restrictions may have an adverse effect on the effective risk management of investors. Therefore, it may be appropriate to review the regulations in a way to increase the range of available instruments in the market.
- 3. Considering the recent global regulatory discussions on the clearing of OTC derivatives, creating a CCP for both OTC and regular markets will increase the reliability and efficiency of the market. Some emerging countries have already started to work on establishing CCPs, whereas some are in the planning phase.
- 4. In some jurisdictions there is no collateral requirement to trade derivatives or collateral management tools are inefficient. Collateral management rules may be revised to ensure investor protection, settlement finality and market integrity.
- 5. Product and issuer registration requirements, regulated or self-regulated infrastructure, post trade transparency and collateral arrangements contribute to the soundness and safety of OTC derivatives markets.
- 6. In some jurisdictions taxation is asymmetric among derivative products, which may create market distortions. Tax treatment should be equal, at least for the same group of investment instruments.
- 7. Investor education programs are crucial for the development of the derivatives markets, because investors would be better able to assess the suitability of these products for their investment objectives and understand the inherent risks.
- 8. SROs have several roles for the development of fair and transparent derivatives markets. First of all, they issue risk disclosure forms to streamline the suitability of products for investors. Second, they train market professionals to improve the quality of the services and advice they provide. In addition, SROs train investors to help them make better investment decisions and increase their understanding of derivatives investments. Therefore, SROs should be empowered to develop the derivatives market.

# **DERIVATIVES MARKET IN BRAZIL**

# I. REGULATORY FRAMEWORK

#### Main regulator for the derivatives market

According to Law n. 6.385, derivatives in Brazil are securities and are subject to rules released by the Securities' regulator, the Brazilian Securities Commission (CVM). The Brazilian Monetary Council (CMN) establishes the conditions for financial institutions to engage as counterparties in OTC derivatives transactions and to operate Credit Derivatives.

# • Major regulations

In 2001, Law n. 10.303 included derivatives contracts among those financial instruments listed as securities in Law n. 6.385, the securities' market law. The complementary regulation was then established by the CVM.

CVM Instruction n. 461 rules the entities governing 'organized markets' (EAMO) that include Exchange or OTC market subject to organizational and operational requirements and eliqibility, pricing and transparency criteria, besides self-regulatory activities.

CVM Instruction n. 467 disposes the conditions for the approval of derivatives' contracts traded or registered in organized markets.

CMN and Brazilian Central Bank's (BCB) several rules and Law n. 12.543/11 establishes that derivatives contracts have to be registered in the trade registry systems authorized by the BCB or by the CVM.

The CMN also establishes:

- Resolution n. 2.873/01 and 3.505/07: Conditions for Financial Institutions Trading OTC derivatives.
- o Res. n. 3.312/05 and 3833/10: Conditions for Hedge Transactions Made Abroad by Financial Institutions.
- Res. 2.933/02: Conditions for Credit Swaps by Financial Institutions

# • Types of derivative instruments defined in the legislation.

Derivatives contracts traded in organized markets have to be approved by the CVM and those reported at organized markets are approved by the EAOM, currently the BM&FBovespa and CETIP. All derivatives accepted should be based in "underlying assets of which prices or methodologies are considered consistent and accountable".

CMN Legislation rules the participation of financial institutions as counterparties (for their own account or for third parties) in the OTC derivatives market. These financial institutions are allowed to trade OTC swaps, forwards and options (registered at authorized registering systems) based on: price index, equity index, interest rate and/or exchange rate regularly calculated and publicly disclosed; or other underlying assets which are quoted by exchanges or organized OTC markets or that are based in prices and methodologies consistent, accountable and that take into consideration data parameters that are independent from those of their respective trading desks. Subject to those conditions, underlying assets may include those traded abroad.

Types of institutions that can issue derivatives.

Entities that administer organized markets (EAMO) are allowed to make contracts available in their venues according to the CVM previous approval, or to approve, according to previously defined criteria and current legislation, contracts that are traded outside its venues and are registered into their systems.

Usually, financial institutions are counterparties for the transactions, and trading outside the EAMO venues are reported accordingly to the contracts accepted or authorized by the Entity.

#### Types of intermediaries that can trade derivatives.

CMN Resolution n. 3.505 authorizes multiple, commercial, investment and exchange banks, savings banks (caixa econômica), securities firms and brokers to operate, by its own account or for third parties (clients), swaps, forwards and options registered at organized markets (OTC or Exchanges) authorized by BCB or CVM.

Remaining financial institutions or other institutions authorized by the BCB are only allowed to operate derivatives contracts on its own account. Those trades should be registered according to rules established by Circular BCB 3.082/01 that refers to positions held by financial institutions and other institutions authorized by the Central Bank (BCB).

Since 2002, the Brazilian Central Bank (BCB) is also allowed to carry on swap transactions based on interest and/or exchange rates, in order to fulfill monetary or exchange policies' objectives. Res. N. 2.939/02 and Circular BCB n. 3.099/02 establishes the conditions for such transactions.

Regarding hedge transactions made abroad, Resolution n. 3.312/05 establishes that the flow of funds referred to hedge transactions from rights or obligations related to commercial or financial nature, subject to interest or exchange rate risks can be operated by residents, individuals or legal persons, through banks authorized to operate in the exchange markets and under some conditions.

Considering credit derivatives, financial institutions and those other authorized by the BCB are allowed to operate credit derivatives under conditions which include: counterparties that receive the credit risk must be multiple, saving, commercial or investment banks, credit or financing companies, real estate financing companies or leasing companies (observed that, in the case of leasing companies, underlying assets have to be related/linked to leasing transactions).

Intermediation has to attend conditions defined according to Circular BCB n. 2.951/99 and have a special regime applicable under Basel Rules if those conditions are attended.

# II. SIZE OF THE DERIVATIVES MARKET

### In which markets derivatives are traded?

Derivatives in Brazil are traded in the so-called organized markets, ruled by CVM Instruction n. 461. For derivatives, two venues are currently available: BM&FBovespa's Exchange and OTC venues, that offer standardized contracts and, also in the second case, collateralized contracts, and act as CCP for the settlement of contracts, and CETIP that register bilateral

contracts according to the existent rules offering non-standardized contracts modalities, including structured products (strategies combining derivatives).

In Brazil, most of the trading occurs in the exchange market, especially in the predominant interest and exchange rate futures. Trading can take place outside these venues and be registered at OTC venues, according to the conditions established therein.

# • Types of derivative instruments

At BM&FBovespa, the exchange traded contracts available are: Financial Contracts (Gold; Equity and Price Indexes; Exchange Rates; Interest Rates; Sovereign Debt Instruments); Agricultural Commodities Contracts (Arabica Coffee; Corn; Sugar; Ethanol; Live Cattle; Soybean). BM&FBOVESPA also provides mini futures contracts. Mini contracts represent a fraction of the contracts traded at BM&FBOVESPA, and are available for Coffee, Live Cattle, Dollar and Ibovespa.

Regarding OTC markets at the BM&FBovespa the following contracts are available:

Flexible Options (Flexible Put and Call Options on Equities Indexes - several sub-indexes of Ibovespa and Ibovespa Index – Metal; Soybean; Spot Interest Rate Index; US Dollar); Forwards (Metal; Non-Deliverable Foreign Exchange) and Swaps.

As mentioned, the predominant contracts are the exchange traded interest rates futures and, at OTC, the swaps.

As for CETIP the following instruments are available:

Combined Options; Flexible Stock Index Options; Flexible Commodities Options; Flexible Exchange Rate Options; DI Forward; Credit Default Swap; Cash Flow Swap and Swap Contract. The most usual are swaps contracts (including those with embedded options, called strategies) and Currency NDF.

As previously mentioned, derivatives traded in Brazil can be based on Price Index, Equity Index (Ibovespa, usually), Interest Rates and Exchange Rates, that must be regularly calculated and subject to public disclosure. Other underlying assets (like commodities) are allowed. Warrants are not common.

# Historical, annual statistics of the last 5 years

Derivati	ves at Cetip	(US\$ mn)						
	Swap <sup>1</sup>		Options <sup>2</sup>		Currency <sup>3</sup>		Commodities <sup>3</sup>	
Year	Stock	Volume	Stock	Volume	Stock	Volume	Stock	Volume
2007	161,429	362,108	7,737	17,624	32,341	110,258	0	0
2008	154,484	539,007	20,172	38,956	47,917	191,347	44	296
2009	145,570	234,782	5,781	11,075	35,449	132,636	332	437
2010	180,330	259,216	4,334	10,434	54,326	179,305	878	2,521
2011	65,038	389,682	6,224	10,981	76,014	246,732	705	2,257
Source: Co	etin							

- <sup>1</sup> Includes: Swap, Cash Flow Swap, Credit Default Swap and Swap with Carlito (with or without reset).
- <sup>2</sup> Includes: Flexible Options Shares, Indices, Commodities and Currencies
- <sup>3</sup> No physical delivery

Deriv	Derivatives at BM&FBovespa (US\$ mn)									
	Exchange Traded				ОТС					
Year	Ibovespa	Interest	Exchange						Total	Total <sup>1 3</sup>
real	Index	Rate	Rate	Others <sup>2</sup>	Total (1)	Swaps	Options	Others	(2)	iotai.
2008	2,308	742,904	123,222	1,021	869,456	42,047	7,975	-	50,022	919,478
2009	5,917	2,240,424	126,695	1,388	2,374,425	49,597	26,688	-	76,286	2,450,711
2010	9,901	4,739,397	130,233	2,614	4,882,145	65,863	27,073	0.001	92,937	4,975,082
2011	18,693	2,978,622	94,297	3,366	3,094,977	67,453	5,517	0.100	73,070	3,168,047
Source	Source: BM&FBovespa									

 $<sup>^{1}(1)+(2)</sup>$ 

<sup>&</sup>lt;sup>3</sup> Does not include mini contracts

BM&FBovespa x Cetip (% of Total)							
ŀ	BM&FBovespa Exchange Traded	BM&FBovespa OTC	Cetip	отс	Exchange Traded		
2008	76.1%	4.38%	19.49%	23.9%	76.1%		
2009	90.0%	2.89%	7.09%	10.0%	90.0%		
2010	93.6%	1.78%	4.60%	6.4%	93.6%		
2011	93.3%	2.20%	4.46%	6.7%	93.3%		
Source: E	BM&FBovespa, Ceti <sub>l</sub>	ס					

#### III. ISSUING DERIVATIVE INSTRUMENTS

<u>Conditions for issuers (issuer restrictions, capital restrictions, rating requirements etc.).</u>

Financial institutions that participate on the derivatives markets are subject to Basel rules and to specific legislation referred to its proprietary trading. All transactions are registered on registering systems and are subject to transparency conditions.

Basel rules have distinct requirements for derivatives that are settled through Central Counterparties (CCP, that is the case of the BM&FBovespa traded contracts) that are exempt from capital requirements for the calculation of Risk Weighted Assets (Counterparty Risks). Other contracts are subject to Brazilian stricter Basel requirements, although rules allow for specific (and subject to approval) consideration of risk mitigation elements.

#### Summary of the issue process.

Please see section 2 for the process of authorizing contracts under organized markets and CVM rules.

# Are there any problems with issuing derivative instruments or the issue process?

Brazilian derivatives market is quite liquid, sophisticated and offers diverse alternatives when it comes to traditional types of futures and options. Plenty of hedge and strategy alternatives are available for participants, taking into account futures and options on interest and exchange rates, or combined tailor made contracts. OTC markets are quite transparent and sound, if compared to international markets, but structured securities or credit products are not commonly negotiated, which contributes to a less diverse environment. Structured Notes were recently approved, but complementary regulation is still to be released (please see IV below).

<sup>&</sup>lt;sup>2</sup> Gold, Agricultural Products,

#### IV.COSTS OF ISSUES

 Are there problems with the costs of issuing derivatives? Mainly regulatory costs, such as fees paid to the regulator, exchanges or other authorities and institutions.

Costs are represented by legal and institutional costs (as usually all contracts have a financial institution as counterparty) and registration costs. Collateralized contracts have also the costs of depositing collateral and/or margin requirements. There are costs related to the registration of collateral in civil entities, as required by Commercial Law, but recent legislation is admitting its replacement by registration at depository institutions like CETIP.

Structured Notes, (known in Brazil as Certificate of Structured Transactions or COE), were recently authorized and its complementary legislation is still to be enacted. Structured transactions with derivatives are offered by financial institutions, but still are not entitled to a proper tax and costs regimes, and the underlying derivatives contract is subject to registration.

#### V. TRADING

#### Where does trading take place; exchanges versus OTC?

Exchange trading is predominant in the derivatives market in Brazil. Over 90% of contracts are traded as standardized contracts of BM&FBovespa and these are liquid and referential markets. Futures are the most relevant contracts and the interest rate ones (DI – Interfinancial Deposit Rates) are the most liquid and used as an important source for referential rates and yield curves. Exchange futures contracts are also important. Standardized options - for interest rates, exchange rate market and Ibovespa - are also quite relevant segments. Institutional investors usually operate swaps with collateral, which means that they are traded OTC but registered in the OTC venues of BM&FBovespa that act as CCP for the settlement of transactions. Non-standardized options (or bilaterally collateralized), non-deliverable forwards and non-collateralized swaps are traded OTC and registered at CETIP.

As mentioned before, because of a very strict legislation, credit derivatives are not usual, and are restricted to financial institutions trading.

#### • Is there market-making?

Exchange futures and options markets are very liquid and trade accordingly BSM, the Exchange SRO conditions. Market making for equities options may occur.

# • Who are investing in or trading? Domestic retail, corporate, institutional or foreign investors.

Main participants are financial institutions, institutional investors mainly represented by investment funds, corporations and non-residents. Pension Funds are restricted to Exchange traded derivatives.

# VI.CLEARING AND SETTLEMENT

#### Is there a CCP?

BM&FBovespa acts as a central counterparty for those derivatives traded on the Exchange venues and registered at this modality, as well as for OTC swaps registered at its OTC registration system when both counterparties require a collateralized alternative.

#### Clearing institution and process.

BM&FBovespa clears derivatives contracts on a multilateral basis, but also offer registration under gross settlement alternatives (for OTC contracts partially collateralized). As for CETIP, swaps are settled under bilateral basis or RTGS, subject to counterparties and types of contracts.

### • Collateral requirements.

The BM&FBovespa establishes assets accepted as collateral that include cash, government bonds and banks CDs (those mentioned on a list) and debentures (that may vary from time to time, according to a list disclosed by BM&FBovespa periodically. The CETIP system is developing a (alternative) collateral system arrangement for transactions settled on bilateral basis.

#### • Settlement institution and process (cash settlement and physical delivery).

BM&FBovespa and CETIP promote settlement of transactions registered within its systems. At BM&FBovespa there are contracts with physical and cash settlement, while at CETIP only cash settlement is available.

#### VII. DISCLOSURE REQUIREMENTS

#### • What are the disclosure requirements for derivatives instruments?

The registration and settlement systems governed by EAOM are required to disclose information on transactions and most of the transactions are subject to mandatory register at these systems.

#### What are the disclosure requirements for derivatives instruments issuers?

Derivatives instruments held by corporations have to be disclosed in financial information statements periodically and since 2008, are subject to stricter regulation that determines the disclosure of exposures and events featuring in the contracts. Financial institutions and investment funds are subject to specific legislation regarding the disclosure of derivatives positions in special reports. As for financial institutions, besides information collected through Cetip and BM&FBovespa systems, banks have to elaborate specific reports on their derivatives transactions to the BCB, besides those under Basel rules. EAMO are subject to legislation for the disclosure of volume and price data with distinct periodicity according to the type of market.

# What are the point-of-sale disclosure requirements for intermediaries?

Suitability requirements for all intermediaries trading securities, including derivatives, are under public audience and will be required in a short term. Point of sale requirements are being discussed under the COE regulation. Information on contracts and respective pricing are currently available on the BM&FBovespa and CETIP venues, as required by CVM regulation. ANBIMA issued Deliberation n. 10 that determines a documented suitability policy and sale requirements for OTC derivatives offered or sold by financial institutions under its open market code. Adoption and compliance with those rules are currently under ANBIMA's surveillance.

# VIII. RATINGS

Are there rating requirements for issuers or products?

No.

• Are there rating requirements for investor groups (institutional, individual) that can invest in derivatives?

Requirements for investors are usually related to its allowance for alternatives other than hedge transactions, or leverage capacity, but not to ratings. As previously mentioned, structured securities are yet to be ruled.

#### IX.ROLE OF SROS IN THE DERIVATIVES MARKET

• Are SROs involved in any aspect of the derivatives market, such as regulating the OTC trading, disclosure requirements, data publication, etc.?

SROs play an important role in the Brazilian derivatives market. Besides the process of authorization of types of contracts, or new amendments on current types, the SROs have to monitor adherence with contracts and to pricing, as well as to establish minimum requirements for conduct rules related to the securities markets intermediaries.

Exchanges also have to monitor and adjust margin and collateral requirements, and rules for their adherence/compliance. The CETIP system is responsible for verifying the correspondence of contracts with those registered and information on types of contracts. The BM&FBovespa SRO, the BSM, monitors and control exposures currently, and, with the CETIP, both performed a very important role at 2008 crises, consolidating and reporting positions and the behavior of transactions' Mark-to-Market to the BCB and CVM.

ANBIMA helped with the organization of a local CSA and is promoting standardization of the bilateral contracts for the Brazilian markets, besides the approval of the suitability initiative mentioned and the monitoring of the adherence of members to these rules.

#### X. RECOMMENDATIONS FOR THE DERIVATIVES MARKET

• Recommendations for the development of the derivatives markets in your jurisdiction, including proper management of the risks in the market.

Brazilian derivatives market is quite sophisticated, transparent and sound. Registration of all OTC contracts with constant improvement of safe alternatives in organized venues has

proved to be very important during the 2008 crisis. Many aspects of the registration and sale process that had to be complemented have been under the attention of regulators and self-regulators since then, with important achievements adopted in recent years. Challenges are still related to the diversification of transactions allowed, while there are still restrictions for the development of structured and credit products. This diversity will be needed to follow the expected growth in the Country's private credit markets, long term debt and portfolio diversification.

# DERIVATIVES MARKET IN BULGARIA

### I. REGULATORY FRAMEWORK

#### • Main regulator for the derivatives market

The derivatives market in Bulgaria is less developed compared to its Western and Central European counterparts. Thus, the regulator of the capital market also coordinates and supervises the activities related to derivatives underlying financial instruments, i.e. the regulator of the trade in financial instruments regulates the trade in derivatives thereon.

The Financial Supervision Commission (FSC) is the main regulator of the capital market in Bulgaria, as well as of investment intermediaries, management companies and investment companies and contractual funds (including insurance companies and pension funds), thus the FSC regulates the activities of all non-banking financial institutions. It was established on March  $1^{\rm st}$ , 2003 under the Financial Supervision Commission Act.

The FSC is an institution that is independent from the executive authority and reports with regard to its activity to the National Assembly of the Republic of Bulgaria. The primary goal of the institution is to assist through legal, administrative and information means and measures the maintenance of stability and transparency of the non-banking financial sector, and to ensure the protection of the consumers of financial services and products.

#### FSC is a member of:

- 1) International Organization of Securities Commissions (IOSCO)
- 2) International Association of Insurance Supervisors (IAIS)
- 3) International Association of Pension Supervisors (IOPS)

# Major regulations

In 1991, the Commerce Act was enacted and with it, the Bulgarian Capital Market was reestablished, and in 1997 the Bulgarian Stock Exchange (BSE-Sofia) was established through merger of the existing Bulgarian Stock Exchange and Sofia Stock Exchange. It was officially licensed by the State Securities and Exchange Commission to operate as a stock exchange on October 9, 1997 and is currently the only functioning stock exchange in Bulgaria. In 2000 The Public Offering of Securities Act repealed the Securities, Stock Exchanges and Investment Companies Act (enacted in 1995) and in 2003 with the FSC Act the Financial Supervision Committee was established. Main regulations with regards to the derivatives markets:

#### 1) Commerce Act

The Commerce Act is one of the main founding and regulating factors of the Bulgarian capital market. Effectively with the Act's enactment in 1991, the capital market renewed its existence. In most cases, the Act is used in a subsidiary fashion, regulating relationships and issues which are left unregulated by the special laws that regulate the financial relationships in the capital market (e.g. The Public Offering of Securities Act, the Law on the Activities of the Collective Investment Schemes and Other Undertakings for Collective Investment et al.)

# 2) The Public Offering of Securities Act1

Enacted in 2000, the Public Offering in Securities Act superseded the Securities, Stock Exchanges and Investment Companies Act and became the standard rulebook regulating and supervising securities operations and investor activity. This Act regulates: (Article 1 of the POSA)

- a. the public offering of, the issuing and disposition of securities, including outside the cases of public offering, as well as the restrictions regarding the disposition of securities issued through non-public offering
- b. the operation of the Central Depository of Securities, the investment and management companies, as well as the terms for conduct of such activities
- c. the requirements to the public companies and to other issuers of securities
- d. the requirements to the persons managing and controlling persons covered under items 2 and 3, as well as to the persons holding 10 or more than 10 per cent of the votes in the General Meeting of the persons covered under items 2 and 3
- e. the state supervision to ensure compliance with this Act

# 3) Markets in Financial Instruments Act<sup>2</sup>

The Markets in Financial Instruments Act (MiFIA) was enacted in 2007 with its primary aim being to create conditions for the development of a transparent, open and efficient market in financial instruments, to ensure protection of investors and to uphold the stability and public confidence in the Bulgarian Stock Exchange. MiFIA is the Bulgarian legal act implementing MiFID. The Act regulates the activity of investment intermediaries and regulated markets in financial instruments. Subject to the MiFIA's regulations are all securities, money market instruments, units in collective investment schemes, options, futures, swaps, forward rate agreements, and any other derivative contracts relating to securities, currencies, commodities, credit risk, climatic variables, other official economic statistics, etc.

# 4) Ordinance No 16 on the conditions and procedure for execution of margin purchases, short sales and lending of financial instruments<sup>3</sup>

It was adopted in July 2004 and modified in May 2008. The ordinance governs the conditions and procedure for execution of margin purchases, short sales and lending of financial instruments. It also governs the cases in which the investment intermediaries have right to use monies and financial instruments of their clients for their own account or for the account of other clients as well as to use their own monies and financial instruments for accounts of their clients. In very rare cases short sales and margin buys were executed on the Bulgarian stock exchange.

There are, in fact, two main reasons why there are no short sales and margin trades in Bulgaria:

- 1) There is no clearing institution such as CCP that can process the clearing and settlement process of the trades, as well as to support the mechanism of lending financial instruments
- 2) The requirements in the Ordinance concerning the financial instruments that can be sold short or can be used as collateral for margin purchases, are too tight and stringent as compared to the current liquidity of the capital market. This is evidenced by the fact that

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<sup>&</sup>lt;sup>1</sup> http://www.fsc.bg/public/upload/files/menu/sk1.pdf

<sup>&</sup>lt;sup>2</sup> http://www.fsc.bg/public/upload/files/menu/MFIA 09- 2 .pdf

<sup>&</sup>lt;sup>3</sup> http://www.fsc.bg/public/upload/files/menu/Ordinance 16 E.pdf

currently (as at the time of drafting this report, i.e. the beginning of December 2011) there are no securities that fulfill the requirements.

# Types of derivative instruments defined in the legislation

The derivative instruments defined in the Law (Market in Financial Instruments Act) are all major classes of derivatives (options, futures, swaps, forward rate agreements, contracts for differences, and other derivative contracts on securities, currencies, commodities, interest rates, indexes or financial indicators of derivative instruments) but there are limitations to what is offered on the Bulgarian capital market currently, i.e. repurchase-agreement contracts on stocks and warrants only.

#### • Types of institutions that can issue derivatives.

Any public company in Bulgaria (or a company headquartered outside the country but traded on the BSE) is allowed to issue the above mentioned derivatives in case it adheres to the rules outlined in the relevant regulations.

# Types of intermediaries that can trade derivatives

All the investment intermediaries that are members of the Bulgarian Stock Exchange can trade in warrants and also be brokers with regard to REPO transactions.

#### II. SIZE OF THE DERIVATIVES MARKET

#### In which markets derivatives are traded?

Overall, the size of the Derivatives Market in Bulgaria is insignificant. Trading volumes with warrants and REPO deals are low compared to the size of the whole capital market.

There is a segment of the BSE for structured products which was established by means of introducing amendments to the Rules of the BSE two years ago. However, due to the low liquidity of the underlying instruments included in the composition of the main stock exchange indices, trade in structured products currently is practically non-existent.

### i. REPO Deals

REPO deals are only executed over-the-counter (OTC) and therefore no official statistics is available for these deals. According to unofficial data, that includes most of the creditors offering REPO deals but not all of them, the size of the REPO market is approximately \$9 million.

#### ii. <u>Warrants</u>

Trading on the Regulated Market for Warrants*								
Volume (lots) Turnover (USD)								
2010	320,641	178,274						
2011 201,226 98,259								

(\*Trading with warrants starts on March 3<sup>rd</sup>, 2010 with ZNOA)

#### III. ISSUING DERIVATIVE INSTRUMENTS

# • <u>Conditions for issuers (issuer restrictions, capital restrictions, rating requirements etc.)?</u>

Besides the general rules for admission to trading, which can be found in English on the website of the Bulgarian Stock Exchange <sup>4</sup>, there are restrictions as to the trading in warrants: Admission to trading on the Market for Warrants is limited to rights from the increase of the capital of public companies subject to the condition that the issue of shares concerned has been admitted to trading according to the procedure established by Part III of the Rules & Regulations of BSE-Sofia, as well as of special investment purpose companies, including upon the initial increase of the capital thereof.

In addition, in order to be admitted to trading on some of the markets organized by the Exchange, the issues of financial instruments must comply with the following conditions:

- They must be dematerialized or duly taken out of circulation (immobilized) according to the relevant procedure and they have to be registered at the Central Depository of Securities;
- 2) They must comply with all conditions of the POSA;
- 3) The transfer thereof is not subject to restrictions or conditions.

In addition to the conditions covered in the previous paragraph, the issues of shares or the corresponding derivative instruments must comply with the following additional conditions:

- 1) No bankruptcy or liquidation proceedings should have been initiated against the issuer thereof or against the issuer of the underlying instrument if any;
- 2) The issuer thereof or the issuer of the underlying instrument, if any, is not engaged in a transformation or reorganization procedure;
- 3) The legal status of the issuer or of the issuer of the underlying instrument, if any, is in accordance with the applicable legislation of the State, where the issuer has its registered office, both in respect of the issuer's incorporation and its activity in compliance with the statutory instruments.

#### • Summary of the issue process.

The issuer, offeror or the person asking for admission of the securities to trading on a regulated market should file with the Commission an application for approval of prospectus for public offering or admission to trading on a regulated market while enclosing:

- 1) the prospectus;
- 2) the issuer's articles of association;
- 3) the issuer's last year-end financial statement, certified by a registered auditor;
- 4) other documents, as laid down in ordinance.

On the basis of the submitted documents, the Commission has to ascertain to what extent the requirements to the issue of the requested approval have been complied with. If the presented data and documents are incomplete or irregular or some additional information or evidence is needed for the correctness of the data, the Commission must send a notification about the found deficiencies and irregularities and/or about the demanded additional information and documents within 10 working days after receiving the application.

<sup>&</sup>lt;sup>4</sup> http://bse-sofia.bg/?page=RulesOfBSE-Sofia

# **IV.COSTS OF ISSUES**

#### i. REPO deals

Direct costs associated with REPO agreements' initiation involve the brokerage commission, which is usually set at around 0.1%. Interest paid on REPO transactions vary depending on the quality of the asset, but for stocks it was set in the range of 11-18%.

#### ii. Warrants

Warrants' issue costs depend on the fee structure of the financial institution contracted to initiate an issue. Historically, such fees were set in the range of \$7,000 to \$10,000.

#### V. TRADING

# Where does trading take place; exchanges or OTC?

Warrant trading is mainly performed on the BSE regulated market while small deals are also made over-the-counter. Deals with REPO contracts, on the other hand, are mainly executed OTC.

#### • Is there market-making?

There are no market makers associated with REPOs or warrants

# Who are investing in or trading? Domestic retail, corporate, institutional or foreign investors.

Investors in warrants are mainly domestic retail and institutional investors (except for pension funds) as well as foreign investors.

#### VI.CLEARING AND SETTLEMENT

#### Is there a CCP?

CCPs (central counterparties) are entities that interpose themselves between the two counterparties in a transaction and thus become "buyer to every seller", as well as the "seller to every buyer". The aim is to prevent default of a player to cause a 'chain reaction' that would endanger the entire system. In Bulgaria, this role is partially performed by the Central Depository of Securities (CDS) AD.

Shareholders of the CDS are the major Bulgarian commercial banks that play an active role in the securities market. Currently the Ministry of Finance is the majority shareholder of the CDS. The Financial Supervision Commission (FSC), the Bulgarian National Bank (BNB) and the Ministry of Finance (MF) directly supervise CDS's operations.

# • Clearing institution and process.

There is no distinct clearing institution in Bulgaria (although the CDS might act as one), mainly because there is no clearing activity developed in the country. However, given the interest in expanding the activities of the Depository in the area of clearing services, the CDS aims at the development of an extension to its system to include possibilities for performing clearing services. This will facilitate the functioning and the liquidity of the market, as well as its possible integration into the international system for performing such services. The introduction of clearing activities should be consistent with the strengthening of the supervision at the level of the European Union.

The clearing activity is driven by the need for provision of extra services to the market participants and is, anyway, close to the activities performed by the CDS. That would give a rise to the introduction and development of a system (through a network of banks) for clearing of obligations, as well as of cash funds and of financial instruments. Following this direction, a module for automatic lending of financial instruments in the case of 'short position' transactions or 'margin' deals, is about to be developed.

#### • Collateral requirements.

There are no collateral requirements for the derivatives market.

#### Settlement institution and process (cash settlement and physical delivery).

The Central Depository AD acts as the settlement institution in Bulgaria. Settlement is carried out by the CDS using DVP (delivery versus payment). This means that the funds necessary to settle transactions are transferred on a net basis, while the financial instruments, subject to transaction, are transferred on a gross basis. Communication between the CDS and the market participants is effected through standardized messages from group 5 of the ISO 15022.

Regarding the settlement of a trade between investment intermediaries, the CDS has implemented the standard settlement period recommended by the G-30 and the World Bank which is T+2. Within the 2-day period after the transaction was made, the securities ownership would be transferred and the payment would be finally completed. The execution priority for processing the transfer orders is as follows:

- 1) Stock Exchange trades always have priority versus OTC market transactions;
- 2) Trades on behalf of the investment intermediaries' clients always have priority versus trades on behalf of the investment intermediaries themselves (with regard to principal transactions for their own account);

This is in conformity with the already accepted gross standard for payments in Bulgaria, and is the only way to reduce the risk inherent in the payment process since the establishment of a risk management system in Bulgaria related to derivatives trading is still an ongoing process. The settlement cycle is in the following succession which is the same for stock exchange and OTC market trades. It is possible on the OTC market, when indicated by the selling party, to process a delivery-free-of-payment (DFP) transaction, i.e. securities delivery only outside the payment system.

# System for organizing the payments for securities traded

The purpose of this system is to ensure the finality of a trade, meaning the securities delivery and the relevant payment process. This is the only way to meet international DVP standards. On the 16<sup>th</sup> of October, 1997, the Bulgarian National Bank (BNB) approved a Bank Unified Standard "Interbank and Intrabank Payments in Respect of DVP Transactions in Corporate Securities". Based on the BNB approval, CDS AD sends orders and requests into the integrated interbank payment system in Bulgaria - BISERA, to ensure the necessary payment for the securities on every agreed transaction. CDS AD performs these operations in co-operation with BankService AD, the interbank cash settlement system operator. The current payment system in Bulgaria, controlled by BNB, allows the banks to act as settlement banks to their clients-non-banking brokerage houses that trade in securities on the Bulgarian capital market.

# VII. DISCLOSURE REQUIREMENTS

#### What are the disclosure requirements for derivatives instruments?

- 1) An investment intermediary, which acts as a systematic internaliser with respect to financial instruments admitted to trading on a regulated market and for which there is a liquid market, must publish its quotes for those instruments.
- 2) In the case of instruments, for which there is no liquid market, the investment intermediary under paragraph 1 hereinabove may disclose quotes only on client request.
- 3) For a particular class of instruments the quotes include:
  - a. Type of the quote;
  - b. Bid and/or ask (offer) price for a size not exceeding the standard market size for the relevant class of instruments;
  - c. Size of the quote.
- 4) The investment intermediary must notify the FSC about the concluded transactions in financial instruments by its multilateral trading facility (MTF), at the latest by the end of the next working day. Such notification contains for each transaction:
  - a. Type and issue of the financial instrument;
  - b. Type of transaction;
  - c. Number of the financial instruments subject of the transaction;
  - d. Unit price;
  - e. Date and time of the transaction;
  - f. Particulars about the parties to the transaction;
  - g. Other information, as laid down in ordinance.
- 5) The issuer's management body is responsible for drawing up and public disclosure of the financial statements.
- 6) The reports, notifications and other information, which are made public, contain the information needed for investors to make a reasoned (informed) investment decision. Such reports, notifications and information may not hold incorrect, misleading or incomplete data

#### What are the disclosure requirements for derivatives instruments issuers?

- An investment intermediary must notify the Commission of the concluded transactions, on the territory of Republic of Bulgaria, in financial instruments admitted to trading on a regulated market, at its earliest convenience, but not later than the close of the working day following the day of the transaction's conclusion.
- 2) An investment intermediary, which concludes OTC transactions in financial instruments (i.e. transactions outside of a regulated market), must disclose publicly information on the type, issue, number and unit price of the financial instruments, subject of the transaction, the currency of the transaction, date and time of the transaction, indicating that the transaction was entered into outside the regulated market. The disclosure is done:
  - a. Within 3 minutes from the conclusion of the transaction if the transaction was entered into within the trade session of the most relevant market or within the normal hours for trading of the investment intermediary.

- b. Before the opening of the next trade session of the most relevant market or immediately after the beginning of the normal hours of trading of the investment intermediary, if such time sets in earlier, in cases other than those under item "a" above.
- 3) Other requirements to the investment intermediaries' operation, directed to protection of the clients' interests and the financial instruments' market integrity, including for established internal organization and prevention of conflict of interests, prevention and disclosure of market abuses, for records keeping, processing and storage of information, conclusion and execution of contracts with clients, for their content, for disclosure of information to clients, are laid down in ordinance.

### VIII. RATINGS

There are no rating requirements with regard to either issuers of products or investor groups.

# **IX.OTHER ISSUES**

According to the Social Security Code, Bulgarian pension funds are not allowed to invest in warrants.

#### X. ROLE OF SROS IN THE DERIVATIVES MARKET

The Financial Supervision Commission (FSC) (independent from executive authority) is the main regulator of the capital market and thus the derivatives market. The Bulgarian Association of Licensed Investment Firms (BALIF) is in active dialogue with the FSC with regard to the development of the regulatory framework related to derivatives trading. BALIF was instrumental in bringing amendments to Ordinance No. 16 regulating short sales and margin trades. BALIF has also proposed texts referring to the system of clearing and settlement of financial instruments, finality of payment and establishment of omnibus accounts with the CDS. More information about the role of the FSC can be found in the beginning of the document under section I.

# XI.RECOMMENDATIONS FOR THE DERIVATIVES MARKET

Observing the low volume and liquidity of Bulgarian derivatives market, we could highlight the following points and suggest strategies for improvement of the situation:

The Bulgarian capital markets as a whole and the derivatives market in particular suffer from extremely low trading volumes in the underlying markets. Hence, the primary efforts have to be directed towards invigorating the trading activity of domestic and foreign investors, as well as increasing their confidence by;

- Creating an independent and fully functional clearing institution (CCP);
- > Communicating and emphasizing the benefits of participating in Bulgarian capital market to domestic and foreign investors which namely are:
  - No capital gain tax;
  - Flat 10% tax on income both for corporations and physical persons;
  - Very sound macroeconomic stability the second lowest debt/GDP ratio in Europe;
     consistent policy of budget surpluses or very low budget deficits in the last 14

years; fixed currency exchange ratio of the BGN to the Euro (1 Euro = 1.95 BGN); very high levels of foreign currency reserves;

- 5% withholding tax on dividends;
- Political stability- all governments for the last 14 years have completed their mandate (term of office), following regular general elections;
- Attractive financial ratios (P/E, P/B etc.) of the most Bulgarian blue chips
- More active role of the government in the capital market, including active privatization through the stock exchange;
- Cooperation agreements between BSE-Sofia and larger European stock exchanges facilitating cross-border trades in an effort to modernize stock trading and allow dual listings. The impending privatization of BSE-Sofia and Central Depository of Securities may work toward this end by bringing expertise and attracting new funds in the region.

# **DERIVATIVES MARKET IN KOREA**

#### I. REGULATORY FRAMEWORK

# 1. Main Regulators

The Financial Services Commission (FSC), Financial Supervisory Service (FSS), Korea Exchange (KRX), Korea Financial Investment Association (KOFIA).

# 2. Major Regulations

#### 2.1. Laws:

Financial Investment Services and Capital Markets Act (FSCMA); Enforcement Decree and Rules of the Financial Investment Services and Capital Markets Act.

#### 2.2. Regulations:

Enforcement Bylaws of the Regulations on the Business Conduct and Services of Financial Investment Companies.

#### 2.3. KRX Regulations:

Enforcement Rules of the Derivatives Market Business Regulation.

#### 2.4. KOFIA Regulations and Standards:

Enforcement Bylaws of the Regulations on the Business Conduct and Services of Financial Investment Companies; Regulations on the Management of Agreements of Financial Investment Companies; Regulations on the Operation and Review of the OTC Derivatives Review Committee<sup>5</sup>; Standards for Internal Control of Financial Investment Companies; Standards for Management of Derivatives Risk Limits<sup>6</sup>.

# 3. Types of Derivative Instruments Defined in the Legislation

#### 3.1. Definition of Financial Investment Products (Article 3 of FSCMA)

Financial investment products are financial instruments that can potentially cause money losses.

#### 3.2. Definition of Derivatives (Article 5 of FSCMA)

Derivatives are financial investment products that can potentially cause money losses, exceeding the amount of original capital. They are divided into exchange-traded derivatives and over-the-counter (OTC) derivatives, depending on where transactions are taking place.

<sup>&</sup>lt;sup>5</sup> Provisional title

<sup>&</sup>lt;sup>6</sup> Provisional title

#### Securities No Potential money Exchange-Financial losses exceeding Traded Investment Yes the original capital Derivatives Products Trading/Not Possibility of Financial trading on Derivatives money losses **Products** the regular No No market Non-financial Investment OTC **Products** Derivatives

#### **Financial Investment Products Classification**

Exchange-traded derivatives include futures and options traded on the KRX; futures and options traded on foreign derivatives markets, and foreign derivatives transactions, such as metal transactions on over-the-counter markets in accordance with the regulation of the London Metal Exchange (LME), bullion transactions in accordance with the regulation of the London Bullion Market Association (LBMA), over-the-counter foreign exchange transactions in accordance with the regulation of the U.S. National Futures Association (NFA), over-the-counter foreign exchange transactions under the Commodity Exchange Act of Japan (CEA), vessel freight transactions in accordance with the regulation of the Vessel Freight Leading Dealer Association (FFABA), energy transactions on over-the-counter markets in accordance with the regulation of the Intercontinental Exchange (ICE).

Over-the-counter derivatives are derivatives which are not exchange-traded derivatives.

# 3.3. Definition of Derivative-Linked Securities (Article 4 of FSCMA)

Derivative-linked securities are securities that, according to predetermined measures, indicate the right to determine the amount to be paid or recovered, based on the change in price, interest rate, indicator and unit of the underlying assets, or on the change of the index based thereon.

# 4. Types of Institutions That Can Issue Derivatives

Exchange-traded derivatives are products whose listing is managed by the KRX, and they may not be issued by financial investment firms. Over-the-counter derivatives may be issued by a financial investment company accredited by an over-the-counter derivative broker and dealer, and licensed by KOFIA's OTC Derivatives Review Committee. Derivative-linked securities may be issued by a financial investment company that has been accredited by a securities brokerage and over-the-counter derivatives brokerage.

### 5. Types of Intermediaries That Can Trade Derivatives

Exchange-traded derivatives are traded by brokers and dealers. A broker is a financial investment company that sells and purchases derivatives for its own account, regardless of on whose behalf this is done. A dealer is a financial investment company that sells and purchases derivatives for others' accounts, regardless of on whose behalf this is done.

# II. SIZE OF THE DERIVATIVES MARKET

#### 1. Which Markets Are Derivatives Traded On?

Derivatives are traded on the exchange and over-the-counter markets. Exchange-traded derivatives are traded only on the KRX.

# 2. Types of Derivative Instruments:

The types of derivative instruments available in the regulated market are forwards, futures, swaps, options (exchange/OTC), and their underlying assets include equity, interest, currency, credit, commodity, exotic (life expectancy, excess death rate, etc.).

# • Historical annual statistics of the last 5 years

**Trading Volumes by Year (Unit: USD million)** 

Classification	2007	2008	2009	2010	1H of 2011
Stocks-related trading	53,783,027	38,666,974	30,661,147	47,395,293	35,079,627
Forward	1,922	2,401	1,349	1,467	2,397
Futures	3,816,521	4,558,893	5,654,029	6,737,469	3,855,266
Swap	16,967	26,814	7,977	16,047	14,379
Option	49,947,617	34,078,866	24,997,792	40,640,310	31,207,585
Interest Rate-related trading	4,840,610	6,212,805	6,757,806	8,061,469	4,299,647
Forward	111,864	160,474	192,730	53,296	9,293
Futures	2,933,465	3,538,955	3,900,295	4,576,736	2,610,753
Swap	1,666,957	2,259,532	2,482,202	3,282,530	1,642,676
Option	128,324	253,844	182,579	148,907	36,925
Foreign Exchange- related trading	7,069,163	10,315,504	11,548,032	11,094,111	5,218,658
Forward	5,820,252	8,766,751	9,674,318	9,601,719	4,553,089
Futures	546,701	720,615	1,461,844	1,128,792	456,940
Swap	376,944	537,557	349,466	289,102	167,764
Option	325,266	290,581	62,404	74,498	40,865
Bullion Transaction and Commodities-related trading	12,847	32,229	13,657	34,251	20,508
Forward	7,523	13,571	3,452	1,863	1,990
Futures	1,687	8,506	7,222	26,046	12,585
Swap	1,124	2,496	2,313	5,218	3,623
Option	2,513	7,656	670	1,124	2,310
Credit trading	2,943	6,429	5,377	6,073	4,073
Credit Default Swap	1,084	6,429	5,304	3,608	4,003
Total Return Swap	1,859	0	73	2,465	70
Total	65,708,590	55,233,941	48,986,019	66,591,197	44,622,513

Types of derivative instruments available on the OTC market in the last 5 years

Trading Volumes by Year (Unit: USD million)

Classification	2007	2008	2009	2010	1H of 2011
Stocks-related trading	95,778	155,355	109,148	319,789	147,774
Forward	1,992	2,401	1,349	1,467	2,397
Swap	16,967	26,814	7,977	16,047	14,379
Option	76,819	126,140	99,822	302,275	130,998
Interest Rates-related trading	1,906,995	2,671,720	2,857,511	3,484,733	1,688,894
Forward	111,864	160,474	192,730	53,296	9,293
Swap	1,666,957	2,259,532	2,482,202	3,282,530	1,642,676
Option	128,174	251,714	182,579	148,907	36,925
Foreign Exchange- related trading	6,522,462	9,594,889	10,082,006	9,965,319	4,761,718
Forward	5,820,252	8,766,751	9,674,318	9,601,719	4,553,089
Swap	376,944	537,557	349,466	289,102	167,764
Option	325,266	290,581	58,222	74,498	40,865
Bullion Transaction and Commodities-related trading	11,115	23,723	6,363	8,205	7,923
Forward	7,523	13,571	3,452	1,863	1,990
Swap	1,124	2,496	2,313	5,218	3,623
Option	2,468	7,656	598	1,124	2,310
Credit trading	2,942	6,429	5,377	6,073	4,073
Credit Default Swap	1,084	6,429	5,304	3,608	4,003
Total Return Swap	1,858	0	73	2,465	70
Total	8,539,292	12,452,116	13,060,405	13,784,119	6,610,382

#### III. CLEARING AND SETTLEMENT

#### 1. Is There a CCP?

Korea is now preparing to introduce an OTC central counterparty (CCP) in the following manner. First, the Financial Investment Products Transactions Clearing Service <sup>7</sup> was established to allow a clearing house to force a counter party, in the event of debt occurrence, to bear the debt acquisition or novation in a certain financial investment product transaction. In the future, a Clearing House Approval System<sup>8</sup> will also be introduced to offer various types of services, including OTC derivatives, securities lending transactions, RP, etc. Meanwhile, in order to ensure the stability of settlements, a clearing house, in principle, is not permitted to carry out activities, other than clearing itself. Second, in the case of an OTC derivative transaction whose default may have a significant adverse effect to the domestic market, trading is required to be settled through a clearing house. On the other hand, after the revision of the relevant laws, the KRX shall grant authorization to a CCP on OTC derivatives, such as interest rate swaps, that are required to be cleared.

<sup>&</sup>lt;sup>7</sup> Provisional title

# IV.DISCLOSURE REQUIREMENTS

# 1. What are the Disclosure Requirements for Derivative Instruments?

The FSS, KRX, and KOFIA require a quarterly operating report to be disclosed on a regular basis, and a report on business circumstances to be disclosed on an ongoing basis.

The reports on business circumstances shall include information on financial accidents, civil suits, regulators' recommendations, requests and orders, changes in financial structures, debt, profit and loss, as well as other important matters on corporate management. A financial investment firm shall make its disclosure documents available to the public through its website, keep them at its branches and provide them upon investors' request.

# V. SELF-REGULATION ON DERIVATIVES

# 1. Obligations to Explain Derivatives and Notify of the Risks Involved

When recommending certain investment products to a retail investor, a financial investment company shall simultaneously offer an explanation note to the investor. KOFIA sets the standards on the explanation note.

**Explanation Note on Derivatives:** Exchange-traded derivatives, foreign derivatives transactions, like-kind foreign currency futures trading (FX margin transaction), OTC derivatives, equity-linked warrant.

Investment explanation is required by the laws. In addition, when a retail investor wishes to trade publicly-offered derivative-linked securities (excluding ELWs-equity linked warrants) or like-kind foreign currency futures, financial investment companies shall provide an additional key explanatory note.

When a retail investor wishes to trade ELWs, he/she is required to complete investment education courses, approved by KOFIA, in advance.

# Standards on 'Cautionary notification regarding day-trading risks'

In case a financial investment company wishes to open an account for stocks transactions, ELW and exchange-traded derivatives on behalf of retail investors, the company shall distribute a 'Cautionary notification regarding day-trading risks' and explain it.

In case publicly-offered derivative-linked securities (excluding ELWs) meet the money loss criteria for the first time prior to the maturity day or the final day of seeking redemption, investors shall be notified of the fact that money loss criteria are met, as well as of the redemption before maturity criteria and the expected rate of return in case of redemption before maturity.

#### Standards on 'Cautionary notification regarding system-trading'

When a retail investor applies for transactions on a system trading program, or he/she trades securities or exchange-traded derivatives without a proper understanding of the relevant program, a financial investment company shall inform the investor that he/she may incur huge losses. The company shall also issue a 'Cautionary notification regarding system-trading' and provide a detailed explanation thereof.

# 2. Matters Related to Property Gains

A general investor, who is selected on a lottery basis, through other random means, on superiority basis or based on their correction of certain investment activities regarding derivatives, may not obtain property gains exceeding KRW3 million at a time.

However, a general investor who is selected on a lottery basis regarding like-kind foreign currency futures and ELWs shall not be offered any property gains.

In general, property gains offerings shall be approved in advance by a compliance officer or a CEO, or shall undergo reporting procedures. However, the above-mentioned applies to derivatives additionally.

# 3. Matters on Like-kind Foreign Currency Futures Trading (FX margin transaction)

# Regulation on the Limits of Minimal Trust Margin and Maintenance Margin

Trust margin shall amount to more than USD 10,000, while maintenance margin shall amount to more than 50% of the trust margin. A financial investment company shall obtain quotations from the members of more than two foreign derivatives markets, and present them to investors.

When a financial investment company provides educational courses or presentations, or offers mock-investment sessions to investors who are not eligible to participate in like-kind foreign currency futures trading, the company shall notify investors of the risks involved in the trading, and shall ensure that they have a full understanding thereof.

#### **VI.OTHER ISSUES**

# 1. Are There Any Restrictions on Individual Investors Related to Investing in Derivatives?

Before opening a derivatives account, an individual investor shall be well aware of his/her own investment experience and objectives, financial condition and the losses that can possibly exceed the amount of money originally invested. Also, he/she is required to take a course on derivatives.

#### VII. RECOMMENDATIONS FOR THE DERIVATIVES MARKET

#### 1. Exchange-Traded Derivatives Including KOSPI200

#### 1.1. Raising the Multiplier for KOSPI200 Options

The contract size of a KOSPI200 futures contract is determined as the stock price index multiplied by KRW 500,000 (the multiplier), while that of a KOSPI200 options contract is the premium multiplied by KRW 100,000 (the multiplier). The multiplier for KOSPI200 options would be increased to KRW 500,000, same as the multiplier for KOSPI200 futures. This shall lead to the simultaneous decline of trading volumes and transaction amounts on the options market, thus decreasing speculative transactions and reducing the derivatives market risks. It would also disperse the liquidity concentrated in the KOSPI200 options market to other

markets, mitigating the adverse effects that the derivatives market could have on the spot market.

#### 1.2. Raising the Cash Deposit Ratio for Individual Investors

Currently, those, who are subject to paying prior entrustment guarantee, including retail investors, shall deposit in cash more than one third of the amount at the time of futures trading. However, the ratio would be increased to more than one half to ensure the settlement stability of an individual investor in a derivative transaction.

# 1.3.Offering a Mock System for Derivative Trading and Related Education for Individual Investors

Currently, securities and futures companies provide mock-trading systems to general investors, focusing on attracting new investments and promoting marketing activities. However, this is not enough for them to experience actual investments before trading occurs. Thus, it is desirable that KOFIA and the KRX offer retail online/offline education courses on mock-trading systems to investors, so that they can be informed of the risks of derivative trading, and the importance and failures of risk management. This would help retail investors make careful investment decisions and get sufficient investment experience beforehand.

# 2. Measures to Improve the ELWs Market

# 2.1. Restrictions on Quotation Submissions for ELW by LPs other than Liquidity Providing

Currently, LPs are required to submit quotations\* [at random price (spread)] only if they reach the 'reporting ratio', in other words, when the market spread ratio exceeds 20%. However, as LPs submit quotations exceeding the reporting ratio on an ongoing basis, it has been pointed out that they induce their desired market price.

- \* Mandatory Levels: within five minutes within 20% both directions more than 100 securities
- \* Actual Execution: always within  $7 \sim 9\%$  both directions more than 80,000 securities

Thus, it is proposed that LPs should be required to submit the liquidity provision quotation when the market spread ratio exceeds 15% (a spread of 8 to 15% can be quoted when the ratio exceeds 15%) This will make it impossible for LPs to submit arbitrary quotations, and will help reinforce their primary functions and price fairness in general. In addition, as it is difficult for scalpers to get a stable return through LPs' quotations, scalpers' transactions are likely to be reduced.

#### 2.2. Restrictions on the Number of ELWs Listed

Currently, securities firms apply for new ELW listings about twice a month. When securities firms meet the listing requirements, such as restrictions on the underlying assets, the period of exercising rights (from three months to three years), and issuance of deep out-of-money ELWs, they can have ELWs newly listed without undergoing a separate evaluation.

In the future, evaluation standards for ELWs should be strengthened by restricting securities firms from issuing ELWs more than once a month. This would prevent the reckless listing of ELWs by securities firms wishing to increase the prospects for success of ELWs.

# **DERIVATIVES MARKETS IN MEXICO**

# I. REGULATORY FRAMEWORK

#### • Main regulator for the market

The main regulator for the derivatives market in Mexico is the Central Bank of Mexico (Banxico). Other authorities responsible to monitor the proper functioning of the derivatives market are the Ministry of Finance and Public Credit (SHCP) and the National Banking and Securities Commission (CNBV).

It is important to mention that, practically, the derivatives market in Mexico is self-regulated. There are rules and standards which are monitored and sanctioned by SROs, namely the Mexican Derivatives Exchange (MexDer) and the Clearinghouse for Derivatives (Asigna).

# • Major regulations

- Instruction 4/2012 issued by Banxico and addressed to the Credit Institutions, Brokerage Firms, Mutual Funds and Limited Purpose Financial Companies on derivative operations.
- o Instruction 1/2002 issued by Banxico on the Rules for Mutual Funds Specialized in Retirement Funds when holding financial operations known as derivatives.
- Rules addressed to market participants with contracts on derivatives listed in Exchange (issued by CNBV)
- Prudential Provisions that must be followed by market participants when operating with contracts on derivatives listed in Exchange (issued by CNBV)

#### • Other relevant regulations

All the trading, allocation, clearing and settlement procedures are well defined by the Internal Regulations and Operatives Manuals of MexDer and Asigna.

## Types of derivative instruments defined in the legislation

The current regulations define the following products: futures, forwards, options, swaps, credit derivative operations, operations with synthetic derivatives and embedded derivatives.

Legislation also appoints the underlyings on which the different financial institutions may hold derivative operations, depending on the type of institution concerned.

The main financial underlyings are about shares, a group or basket of shares or bonds tied to shares listed on a stock exchange, stock price indices traded on a stock exchange, national currency, foreign currencies, price indices relating to inflation, nominal interest rates, real or surcharge rates, rates relating to any debt security and indices based on these rates.

Moreover, some of the main commodities allowed are gold, silver, aluminum, copper, corn, wheat, soy, sugar, natural gas, rice, sorghum, cotton, oats, coffee, cocoa, barley, cattle, hogs, milk, and soybean oil, among others.

# • Types of institutions that can issue derivatives

To list a new contract at the derivatives exchange, it is necessary to have the approval of financial authorities, for which the exchange must justify its request by providing all the details of the product and the underlying asset, among other data.

At the organized derivatives market, derivatives products are listed by the exchange itself (MexDer). Advice of participants is considered by the Committee on Admission and New Products of the exchange, who is the responsible of the analysis for the viability of a possible new product.

#### • Types of intermediaries that can trade derivatives

The organized derivatives market can be accessed through the Operators, who are corporations authorized to operate as a commission agent for one or more Clearing Members.

Financial Institutions who may use derivatives are: credit institutions (development banks and commercial banks), brokerage firms, mutual funds, Limited Purpose Financial Companies, Mutual Funds Specialized in Retirement Funds, provided that they do it through an authorized operator.

In addition to the financial institutions mentioned in the previous paragraph, natural persons and corporations can also access the derivatives market through the services of Operators.

It is important to remark that Brokers must sign a contract with at least one Clearing Member, through which the Clearing Member becomes jointly responsible before the Clearing House for the transactions the Broker performs on its own behalf.

# II. SIZE OF THE DERIVATIVES MARKET

#### In which markets derivatives are traded?

In the case of organized markets, the derivative products are traded in MexDer which is the only derivatives exchange in Mexico, authorized by the Ministry of Finance and Public Credit. Warrants on individual stocks, on baskets and stock indices are traded on the Mexican Stock Exchange (BMV). On the other hand, it is possible that financial institutions trade derivatives on the OTC market.

# Types of derivative instruments

Currently in MexDer there are listed contracts on futures and options on the following underlying instruments:

Futures	
Currencies	US Dollar
	Euro
Index	IPC Index of the Mexican Stock Exchange
Interest Rates	28 day Interbank Interest Rate
	91 day Treasury Bill Certificate
	3 Year Bond
	5 Year Bond
	10 Year Bond
	20 Year Bond
	30 Year Bond
	Inflation Index
	2 year Interest Rate Swap Futures
	10 year Interest Rate Swap Futures
Single Stocks	9 different single stocks
_Options	
Currencies	US Dollar
Index	Futures on the Mexican Stock Exchange Index
Single Stocks	9 different single stocks

# Historical, annual statistics of the last 5 years

Trading volume by year (US\$ million)*							
	2007	2008	2009	2010	2011		
Futures	2,106,650	526,657	394,939	385,771	373,939		
Currencies	32,521	26,656	17,906	58,797	64,677		
Equity Index	26,110	20,842	22,295	35,731	31,620		
Interest Rates	2,048,019	479,159	354,738	291,240	277,630		
Individual Equities	0	1	0	3	12		
Options	3,384	1,165	800	4,062	1,784		
Equity Index	3,384	1,040	722	3,894	1,693		
Currencies	0	0	1	10	3		
Individual Equities	0	125	76	158	88		
Source MexDer	_						

#### • Types of derivative instruments available in the OTC market.

In the OTC market, the main contracts traded are swaps and forwards.

The amount traded during 2011 by banks and brokerage firms, including interbank transactions and operations with counterparties, was up to US\$ 18,431,544 million, according to Banxico.

#### III. ISSUING DERIVATIVE INSTRUMENTS

# • Conditions for issuers (issuer restrictions, capital restrictions, rating requirements etc.).

As previously specified, derivatives in Mexico are not issued but listed, so entities can only hold or trade derivatives. Those entities interested in holding derivative transactions on their own, must obtain authorization from Banxico.

In addition, the applicable regulations specify the types of derivative transactions that each institution is allowed to perform. As an example, brokerage firms may only hold credit derivatives operations on behalf of third parties if they have a prior express instruction by a

customer. Meanwhile, mutual funds and limited investment companies (Sofoles) may only carry out transactions with the underlying derivatives allowed, always respecting their corresponding corporate investment regime.

On the other hand, financial institutions are required to maintain a global capital according to market risks, credits and operations incurred in the performance of their activities. The derivative transactions are considered for the calculation of the minimum aforementioned capitalization.

# Summary of the issue process.

#### In the organized market:

Advice of participants is considered by the Committee on Admission and New Products of the exchange, who is responsible for the analysis of the viability of a possible new product. In case of being appropriate, financial authorities have to approve it, along with its main characteristics specified by the exchange.

#### In the OTC market:

Transactions on derivatives other than credit linked securities which are held by financial institutions and with other domestic or foreign financial institutions as well as those performed by mutual funds and limited investment companies with their counterparties must be documented on framework contracts, which reflect guidelines contained in standard contracts recognized in international markets (usually in line with the International Swaps and Derivatives Association ISDA formats).

The credit linked securities must be documented in an issuing report.

The operations on derivatives and their characteristics can be agreed in the way the framework contract itself establishes, provided that such transactions are recorded and confirmed by any means, providing written evidence of the conclusion of the corresponding operation, the same day they are held. They must be reported to Banxico.

#### IV.COSTS OF ISSUES

 Are there problems with the costs of issuing derivatives? Mainly regulatory costs, such as fees paid to the regulator, exchanges or other authorities and institutions.

In the organized derivatives market, MexDer has different trading fees that depend on the volume of contracts traded. Also, Asigna determines several service fees: clearing and settlement fee, delivery fee for the physical delivery contracts upon the expiration date, and exercise and assignment fee.

#### V. TRADING

# Where does trading take place; exchanges versus OTC?

Most operations on derivatives are done OTC, with almost 94% of the derivatives market, while the rest is carried out on the organized market (MexDer). There is currently a project in Mexico to introduce more derivatives to the organized market. Please see section 11.

# • Is there market-making?

In MexDer, there are market makers who are eligible for discounts on fees and commissions charged by MexDer itself and the clearing house (Asigna).

These market makers are operators that have been approved by MexDer, and are required to maintain permanently their own quotes on purchase or sale of futures and options contracts in respect of the Class in which they are registered, in order to promote trading.

# • Who are investing in or trading? Domestic retail, corporate, institutional or foreign investors.

According to Banxico data, the distribution of operations in the OTC market by kind of counterparty, including Mutual Funds, Mutual Funds Specialized in Retirement Funds and other financial entities (not including interbank operations) in 2011 was the following:

Investors	%
Institutional*	14.48
Domestic Retail	1.77
Corporate	2.59
Foreign Investors	80.94
Total	100
*Including Mutual Funds, Mutual Fu	
Retirement Funds and other finar	ncial entities (not
including interbank operations)	

#### VI.CLEARING AND SETTLEMENT

#### Is there a CCP?

Asigna, Compensación y Liquidación (Asigna), is the Central Counterparty and guarantor of all the financial obligations stemming from contracts traded on MexDer.

Asigna is made up by Clearing Members, which are administration and payment trusts who contribute with the resources that make up the equity of the clearinghouse, as well as the Clearing Fund and Margin Fund that are part of the Safeguard System.

# • Clearing institution and process

Trades in the organized market are registered in accounts and sub-accounts administered by Asigna. At the clearing, if the net position is short, the new short positions are added and the long positions are canceled. If the existing net position is long, the new long positions are added and the short positions are canceled.

Global accounts, in which transactions for one or more clients are entered following their instructions individually and anonymously, are managed on a net basis.

#### • Collateral requirements

Participants must submit funds for each open contract they maintain. These funds are called Minimal Initial Margins (AIMs) and their purpose is to cover against a change in prices.

AIMs maybe submitted in cash and/or securities, and are kept in the Margin Fund, which are managed and invested by Asigna and are collected daily as part of the Daily Settlement Process.

Each security is received with a discount (haircut) applied to the value of each security as published by a price vendor. The discount is defined by the risk area of Asigna based on the analysis of Value at Risk for each of the securities accepted as AIMs.

#### Settlement institution and process (cash settlement and physical delivery)

Asigna updates Clearing Members rights and obligations through the Daily Settlement of the Market, next business day following the trade day. Settlement is performed through the Interbank Electronic Payment System of Banxico.

Daily Settlement includes the following items: AIMs, contributions to the Clearing Fund, gains and losses resulting from changes in the settlement price, option premiums, exercise and assignment, fees and commissions, amount from settlement of contracts at expiration (cash settlement), and interests generated on Margin Fund and Clearing Fund Investment.

Settlement at expiration of futures contracts on foreign currency (the peso/dollar exchange rate) is performed in kind through an agent bank with offices in Mexico and in the United States of America, two business days following the expiration date of the contract.

Futures and options on stocks are settled through ledger transactions by the Mexican Stock Exchange through an agent brokerage firm. These are settled three business days after the expiration date of the futures contract.

#### VII. DISCLOSURE REQUIREMENTS

#### • What are the disclosure requirements for derivatives instruments?

All the rights and obligations of each derivative product listed in MexDer are established at the General Contract Conditions (GCCs). There are also terms and conditions that Clients, Clearing Members and Brokers must abide by in trading, clearing and settling a contract.

The General Contract Conditions specify the characteristics of each type of Contract listed on MexDer, including underlying asset, size and type of contract, settlement features, trading hours, ticker symbol and others.

These GCCs have to be approved by financial authorities before they can be published and made effective.

In addition, MexDer publishes a broad range of useful market information for investors, such as statistics, market summary, futures and options bulletins, and others, on its website.

# • What are the disclosure requirements for derivatives instruments issuers?

Financial institutions such as brokerage firms, banks and mutual funds are guided by particular rules in terms of recognition, valuation, presentation and disclosure of financial statements for derivative products.

Financial institutions are required to announce, through notes to financial statements, information such as the book value of financial assets and liabilities related to derivative products with negotiation purposes, net profit and losses for financial assets and liabilities related to derivatives, a description for each hedge operation realized along with the nature of the hedged risks, and in general terms, any information that allows users of financial statements to evaluate the nature and risks that each entity is exposed to, and which are the results of using derivative products.

Likewise, corporations that handle derivative products are also required to disclose those operations through notes to financial statements.

#### What are the point-of-sale disclosure requirements for intermediaries?

Financial institutions are not allowed to offer derivative products directly at their branches. They are required to establish guidelines and policies to identify the investment objectives for each customer (suitability test) and to provide full information for an appropriate investment decision, such as the implicit risks of the products offered and the fees charged for each of the services provided.

It is important to emphasize that financial institutions are required to keep, for a period of five years, all the recommendations made to their customers related to holding derivative products along with the information used to support their analysis.

#### VIII.RATINGS

# Are there rating requirements for issuers or products?

No.

# • Are there rating requirements for investor groups (institutional, individual) that can invest in derivatives?

Requirements for investor groups are based on the alternatives resulting from the suitability test, not from ratings. The choices given to retail investors in derivatives products are usually very limited due to the risk. Institutional or professional investors have access to a larger scope of derivative instruments.

# **IX.OTHER ISSUES**

# Are there any restrictions for individual investors to invest in derivatives?

Customers interested in derivatives trading, must turn to a Broker or Clearing Member authorized by MexDer. It is necessary that the customer, individual investor or legal entity, signs an intermediation contract with the Broker or Clearing Member and a trust contract, which allows the trades' settlement.

Before those contracts are signed, the Broker or the Clearing Member has to do a suitability test to its customers to determine the convenience of trading derivative instruments, and if it results convenient, then determine the conditions and limits of their trading.

Subsequently, clients must hand in a determined amount of money to their Broker or Clearing Member. This amount is the AIMs for each open contract they have.

# • Anything specific to your jurisdiction that you would like to add.

An outstanding point of Mexican derivatives market is that regulations, as well as the Operative Manual of MexDer, establishes that people interested in working at this market, must be accredited through an exam proving that they have the technical knowledge about derivatives products and also another one on ethics.

For this purpose, AMIB executes the necessary certification procedures for the different parties in the derivatives market:

- Account Manager
- > Risk Manager
- > Promotion Agent / Sales Representative
- Desk Trader

In addition, MexDer recognizes some foreign and local accreditations using a validation program. The accredited personnel list and its expiration are published by MexDer through its web site.

# X. ROLE OF SROS IN THE DERIVATIVES MARKET

• Are SROs involved in any aspect of the derivatives market, such as regulating the OTC trading, disclosure requirements, data publication, etc.?

MexDer and Asigna are both entitled to act as "market authorities" as SROs, whose primary mission is to ensure order in trading, encourage the proper functioning of the market, adopt measures, policies and criteria to promote stability and development, and impose sanctions when participants fail to comply with their policies and regulations.

For example, all the trading, allocation, clearing and settlement procedures are well defined at the Internal Regulations and Operatives Manuals of MexDer and Asigna.

On the other hand, AMIB helps giving advice to the derivatives exchange to coordinate the needs of its members in terms of all the operative modalities, infrastructure and services for the continuous improvement of the trading system.

# XI.RECOMMENDATIONS FOR THE DERIVATIVES MARKET

• Recommendations for the development of the derivatives markets in your jurisdiction, including proper management of the risks in the market.

As part of an integral effort to reinforce Mexican derivatives market, at 2010 Chicago Mercantile Exchange Group (CME Group) and the Mexican Stock Exchange Group (BMV Group), the parent company of MexDer, entered into a strategic partnership that includes order routing for derivatives products as well as an agreement to pursue potential joint initiatives including product development, marketing and customer education as well as clearing opportunities.

The order routing arrangement gives MexDer customers access to CME Group's benchmark derivatives contracts, including interest rates, foreign currencies, equity indices, energy, metals and agricultural commodities. It also gives CME Group customers access to MexDer's interest rate and equity index derivatives.

Oh the other hand, following the recommendations published by the Financial Stability Board on derivatives market, the Mexican Stock Exchange has been working in two main projects:

- Integral Services for OTC derivatives: The objective is to implement a variety of services for OTC products in order to reduce errors and to increase automation. In the first step, matching and confirmation services, registration services and collateral management services will be offered. Later on, the calculation of flows and settlement will be added.
- Swap Contracts listed on the derivatives exchange: In the next few months, it will be
  possible to list and trade Swaps contracts directly on MexDer. In the first stage, only
  basic swaps will be allowed to be listed (TIIE 28 Interest Rate Swap).

This measure seeks to direct OTC trades into the organized market. In this regard, specific characteristics of each product will be preserved with the advantage that they could be settled through the Clearing House.

# **DERIVATIVES MARKETS IN THAILAND**

# I. REGULATORY FRAMEWORK

# • Main regulators for the market

The markets for derivatives in Thailand are regulated under different jurisdictions depending on the types of underlying products.

# **Exchange-traded derivatives:**

Derivatives based on securities, securities indices, exchange rates, bonds, interest rates, financial indices, precious metal, and crude oil are regulated by the Securities and Exchange Commission (SEC) and Thailand Futures Exchange (TFEX), a subsidiary of the Stock Exchange of Thailand (SET).

Derivatives based on agricultural products are under the jurisdiction of the Agricultural Futures Trading Commission (AFTC) and the Agricultures Futures Exchange of Thailand (AFET).

# Over-the-counter derivatives:

OTC derivatives based on exchange or interest rates remain under the jurisdiction of the Bank of Thailand (BOT).

# Major regulations

- ➤ The Derivatives Act B.E. 2546 (2003) for derivatives trading in TFEX.
- > The Agricultural Futures Trading Act B.E. 2542 (1999) for derivatives trading in AFET.
- ➤ The Financial Institution Business Act B.E. 2551 (2008) for OTC derivatives

# • Types of derivative instruments defined in the legislation

### Exchange-traded derivatives:

Under the current ACT of B.E. 2546(2003), TFEX is allowed to trade futures.

Options and Options on Futures, where the permitted underlying assets are;

- > Equities: Index and Stocks,
- > Debt: Bonds and Interest Rate,
- Commodities: Gold, Silver and Crude Oil,
- Others: Exchange Rate and others as may be announced by the SEC,

under the Agricultural Futures Trading Act B.E. 2542 (1999). There are agricultural futures traded on the AFET which are Rubber Futures, Rice Futures and Tapioca Futures.

#### Over-the-counter derivatives:

Before 2005, the type of derivatives that commercial banks were permitted to undertake was the Plain Vanilla financial derivatives (the basic derivative that cannot be broken down into components). Those are;

- Foreign exchange derivatives comprising Foreign Exchange Forward Contract, Currency Futures, Foreign Exchange Swap, Cross Currency Swaps and Currency Options which are Put Option or Call Option.
- o Interest rate derivatives comprising Interest Rate Swap, Basic Swap, Interest Rate Futures, Forward Rate Agreement and Interest Rate Options which are Interest Rate Cap or Interest Rate Floor.

At present, commercial banks are permitted to undertake certain types of derivative transactions as followed;

- 1. Derivative transaction with the referenced variables are market variables such as interest rate, exchange rate, or financial indices calculated from interest rates or exchange rates, for example;
  - Packaged Vanilla Derivatives, which are combinations of plain vanilla derivatives, for example, Collars.
  - Barrier Derivatives, which are derivatives that set up the barrier levels in order to consider the validity of the contract, for example, Knock-In Forwards or Knock-Out Forwards.
  - o Derivatives which are a combination of plain vanilla derivatives, Barrier Derivatives, and/or digital options, for example, Range Bonus Forwards.
  - o Average Rate Options/ Average Strike Options
  - Cancellable or Extendable Options, etc.
- 2. Derivative transaction with the purpose of hedging commercial bank's own risk.
- 3. Other types of derivative transactions apart from 1 are subject to BOT consideration on case by case basis.

# • Types of institutions that can issue derivatives

# Exchange-traded derivatives

Derivatives contracts, issued by TFEX or AFET (for derivatives based on agricultural products only) can be traded only after the exchanges has submitted the form and terms of such derivatives to the SEC Office (for TFEX) or the AFTC Office (for AFET) for their approval.

#### Over-the-counter derivatives

The Derivatives Act B.E. 2546 (2003) allows derivatives dealers to engage as a counter party in a derivatives contract with any person who intends to trade in derivatives, by entering or offering to enter into such contract.

#### • Types of intermediaries that can trade derivatives

#### Exchange-traded derivatives

For TFEX, there are 2 types of intermediaries that are allowed to trade derivatives in the Exchange;

- "Derivatives broker" means any person who engages as an agent in the business of trading in derivatives on behalf of a public investor, and has been licensed or registered under the Derivatives Act.
- "Derivatives dealer" means any person who engages as a counter party in a derivatives contract with any person who intends to trade, by entering or offering to enter in such contract, and has been licensed or registered under the Derivatives Act.

For AFET, there are 2 types of futures trading business operators that are allowed to trade in AFET:

"Futures Broker" means any person licensed by the Secretary General to execute futures and options orders on behalf of financial and commercial institutions and/or the general public.

• "Futures Trader" means any person licensed by the Secretary General to engage in futures trading for his own account.

# II. SIZE OF THE DERIVATIVES MARKET

# • In which markets derivatives are traded?

Trading can take place in the derivative exchange and the OTC market. There are 2 derivative exchanges in Thailand; Thailand Futures Exchange (TFEX) and the Agricultures Futures Exchange of Thailand (AFET).

# • Types of derivative instruments

# **Exchange-traded derivatives:**

Currently, there are 8 products listed on TFEX;

- SET50 Index Futures,
- SET50 Index Options,
- o Gold Futures,
- o Silver Futures,
- o Interest Rate Futures,
- Single Stock Futures,
- Brent Crude Oil Futures,
- o The newly-listed USD Futures (launched June 5, 2012).

### On AFET, there are listed 5 products;

- o Thai Hom Mali Rice 100% Grade B (Both Options),
- White Rice 5% (Both Options),
- o Ribbed Smoked Rubber Sheet No.3,
- o Block Rubber STR20,
- o Tapioca Chip.

#### Historical, annual statistics of the last 5 years

# Exchange-traded derivatives:

### **Historical statistics - TFEX**

Type of Instruments	2007	2008	2009	2010	2011
50 Baht Gold Futures	-	-	311,591	792,960	1,817,483
10 Baht Gold Futures	-	-	-	178,463	2,171,795
Interest Rate Futures	-	-	-	41	429
Single Stock Futures	-	3,838	145,758	969,353	1,578,092
SET50 Index Futures	1,228,238	2,099,098	2,522,465	2,471,302	4,316,437
SET50 Index Options	8,646	45,684	95,504	107,317	107,993
Silver Futures	-	-	-	-	31,567
Brent Crude Oil Futures	-	-	-	-	3,320
Total Trading Volume (contracts)	1,236,884	2,148,620	3,075,318	4,519,436	10,027,116

Type of Instruments	2007	2008	2009	2010	2011
50 Baht Gold Futures	-	-	7,701	14,456	71,246
10 Baht Gold Futures	-	-	-	3,253	17,247
Interest Rate Futures	-	-	-	-	30
Single Stock Futures	-	12	208	359	1,477
SET50 Index Futures	20,434	28,091	30,945	34,430	99,814
SET50 Index Options	1	6	7	9	13
Silver Futures	-	-	-	-	120
Brent Crude Oil Futures	-	-	-	-	37
Total Trading Value (Million of USD)	20,435	28,108	38,862	52,508	189,985
Exchange Rate (THB/USD)	34.56	33.36	34.34	31.73	30.49

Source: TFEX

# **Historical statistics - AFET**

Type of Instruments	2007	2008	2009	2010	2011
Thai Hom Mali Rice 100% Grade B (Both Options)	-	33	50,114	32	37
White Rice 5% (Both Options)	20,473	36,759	65,032	4,597	187
Ribbed Smoked Rubber Sheet No.3	67,243	112,256	95,657	124,904	128,886
Block Rubber STR20	-	•	-	-	94
Tapioca Chip	3,250	378	30	-	-
Total Trading Volume (contracts)	90,966	149,426	210,833	129,533	129,204
Type of Instruments	2007	2008	2009	2010	2011
Thai Hom Mali Rice 100% Grade B (Both Options)	-	0.4	683	0.5	1
White Rice 5% (Both Options)	91	374	468	34	2
Ribbed Smoked Rubber Sheet No.3	764	1,393	938	2,177	3,096
Block Rubber STR20	-	-	i	-	2
Tapioca Chip	4	0.9	0.1	-	-
Total Trading Value (Million of USD)	859	1,768	2,089	2,211	3,100
Exchange Rate (THB/USD)	34.56	33.36	34.34	31.73	30.49

Source: AFET

# • Types of derivative instruments available in the OTC market. Historical statistics, if available.

According to the BOT's data, trading volume of OTC derivatives transactions done by Commercial Banks registered in Thailand are as followed;

OTC Derivatives	2007	2008	2009	2010	2011
Foreign Exchange Derivatives	92,522	105,572	119,073	156,612	202,489
Interest Rate Derivatives	66,658	90,623	92,099	128,115	162,000
Bond Derivatives	0	195	28	599	292
Equity Index Derivatives	92	90	111	96	84
Commodity Derivatives	25	205	872	1,233	1,617
Credit Derivatives	46	59	24	6	3
Others Derivatives	0	0	0	0	0
Total Derivatives (Millions of USD)	159,343	196,743	212,207	286,661	366,486
Exchange Rate (THB/ USD)	34.56	33.36	34.34	31.73	30.49

Source: BOT

# III. ISSUING DERIVATIVE INSTRUMENTS

• <u>Conditions for issuers (issuer restrictions, capital restrictions, rating requirements etc.).</u>

# **Exchange-traded derivatives:**

Section 67 of the Derivatives Act B.E. 2546 (2003) stated that a derivatives contract may be traded only after the derivatives exchange has submitted the form and terms of such derivatives contract to the SEC Office (Form 67-1 Application for approval of the form and terms of a derivatives contract) and the SEC Office has granted its approval in material substances thereon. Upon the receipt of an application for approval of the form and terms of a derivatives contract, the SEC Office shall consider the application and notify such derivatives exchange of the outcome of its consideration within forty five days from the date of receipt of such application together with all valid and complete supplementary documents as required by the notification of the SEC Office. However, if the SEC Office is unable to conclude its consideration within the period so specified, such notice period shall be extended to not more than thirty days from the prior expiration date.

Section 68 of the Derivatives Act B.E. 2546 (2003) stated that in cases where it is subsequently found that the terms and conditions of derivatives contract approved under Section 67 are not in accordance with current economic circumstances, the SEC Office shall have the power to revoke the approval granted.

Section 69 of the Derivatives Act B.E. 2546 (2003) stated that the SEC Office shall consult the Bank of Thailand prior to granting or revoking an approval under Section 67 and Section 68, if the goods underlying the derivatives is bond or treasury bill, or the derivatives obligates the parties to make a payment in the amount calculated from foreign exchange rate or interest rate.

# Over-the-counter derivatives:

The derivative dealers have to demonstrate that they have in place policies and procedures to prevent conflict of interests and insider trading, as well as systems to ensure such compliance, and that they are able to maintain the minimum amount of capital (in case of banks and finance companies) or net liquid capital (in case of securities companies) required under the respective regulations. Also, prior approvals from lead regulators (i.e. the Bank of Thailand, the Ministry of Finance) are required in the case of banks or finance companies, while policies and procedures for internal control and risk management, as well as systems to ensure such compliance, must be well established by securities companies under the Securities and Exchange Act B.E. 2535 (the SEA).

As regards foreign entities, registration for a derivatives dealer license shall be granted if the same or higher standards of regulations are applied in the home country, and if the entities are not subject to any suspension or banning order issued by the home regulator.

In addition to that, the BOT has issued the notifications to permit commercial banks to undertake derivatives transactions within certain framework. Thus, for derivatives transactions engaged between commercial banks and clients, commercial banks shall have effective risk management procedures and maintain their capital adequacy requirements. Moreover, the BOT prescribes that commercial banks shall conduct client suitability analysis and shall disclose information to clients on the undertaking of the transactions. Some of these key notifications are as follows;

- o The Notification of the Bank of Thailand No. SorNorSor. 12/2551 Re: Permission for Commercial Banks to Undertake Structured Derivative Transactions with reference to Market Variables
- o The Notification of the Bank of Thailand No. SorNorSor. 79/2551 Re: Minimum Requirements on Client Treatment for the Undertaking of Derivatives Transactions
  - The Notification of the Bank of Thailand No. SorNorSor. 14/2551

The BOT prescribes minimum requirements for commercial banks to comply with client treatment for undertaking of derivatives transactions such as; General regulation on the offer or provision of derivatives transactions to clients, Client suitability, Information disclosure of commercial banks, Complaint receipts and problem solving processes on client complaints, Internal control system and Personnel capability.

# IV.COSTS OF ISSUES

 Are there problems with the costs of issuing derivatives? Mainly regulatory costs, such as fees paid to the regulator, exchanges or other authorities and institutions.

### **Exchange-traded derivatives:**

There is no regulatory cost of issuing derivatives product for TFEX. However, there may be some other related costs for developing new system and advertising new products, etc.

# V. TRADING

Where does trading take place; exchanges versus OTC?

In Thailand, derivative trading takes place in the 2 exchanges - TFEX and AFET, while most of the over-the-counter derivatives transactions are offered between commercial banks and their clients.

Is there market-making?

#### Exchange-traded derivatives:

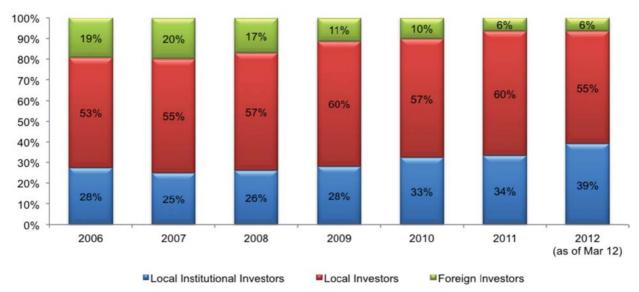
TFEX may procure market makers by permitting the persons registered by TFEX as market makers to submit the order into the trading system in accordance with the rules and conditions prescribed by TFEX.

At present, there is no market maker in AFET.

• Who are investing in or trading? Domestic retail, corporate, institutional or foreign investors.

#### Exchange-traded derivatives:

In 2011, 60% of the total trading came from retail investors, while local institutional investors and foreign investors had a share of 34% and 6%. As of March 2012, the proportion of trading by local institutional investors accelerated to 39%, while the proportion of retail investors trading slowed down to 55%.



Source: TFEX

### VI.CLEARING AND SETTLEMENT

# • <u>Is there a CCP? Clearing institution and process. Settlement institution and process (cash settlement and physical delivery).</u>

For TFEX, all transactions are cleared and settled by cash through the Thailand Clearing House (TCH)'s electronic clearing and settlement system. The most important role of the clearinghouse is to serve as counter party to every transaction. Therefore any member, who has bought or sold a futures contract, has an obligation not to the party on the other side of the transaction, but to the clearinghouse, just as the clearinghouse has an obligation to the member. The clearinghouse will service only its members. Thus, brokers who are not clearinghouse members themselves must make the necessary arrangements to clear their transactions via a clearinghouse member.

The clearinghouse rules require its members to segregate funds for house accounts and customer accounts with the usual provision that in the event of a clearinghouse member's failure, surpluses in the house account shall be applied to any customer account shortfalls, but not vice versa. Under the TCH's clearing rules, all traded futures contracts must be cleared and settled on the next business day (T+1). Each futures contract traded on the TFEX will be marked to the market daily, based on the futures settlement price.

For AFET, the clearing house is an in-house unit in the exchange with the role to oversee that all counter parties abide by the terms and conditions once they enter into a futures contract. In practice, orders are 'cleared' by means of the clearing house acting as the buyer to all sellers and the seller to all buyers.

The Clearing House will require payment of margins in cash for all bids and offers (gross basis) from member at the margin rates prescribed by the Board. At the end of each business day, the Clearing House will report the net amount of money of each clearing member who receives clearing services from the Clearing House so as to inform clearing members if they are required to deposit or settle any additional amount of money, or if they may withdraw any surplus from their respective margin accounts. The net amount will be calculated based on the balance in the margin account after it is marked to market, plus profit or less loss resulting from position offsetting, and less the futures trading fee and clearing service charges.

If additional deposits or settlement of margins are required, clearing members shall deposit money in their deposit accounts within that trade day and the Clearing House shall order the Bank to transfer the sum in such deposit accounts to the Clearing House's deposit account. If the balance in a clearing member's deposit account is less than the amount to be transferred under the order of the Clearing House, the Bank shall transfer only the sum in the account and the clearing member will be required to deposit the difference between the amount to be transferred by order of the Clearing House and the amount already transferred by the Bank into the account of the Clearing House no later than 30 minutes prior to Exchange opening on the next business day (T+1); otherwise, the clearing member shall be deemed as being in default of settlement.

# • Collateral requirements.

For TFEX, the member must deposit the margins in the forms of cash, government bond, Treasury note or other assets according to the rules, procedures and conditions prescribed by TCH. The margins deposited by the member must be valid and free of defect and must not be subject to derogation of rights by any other person. TCH has designated the types of margins as described below.

# 1. Maintenance Margin

The member who has a derivatives position in its house account and/or client account has the duty to deposit assets which are acceptable to TCH as a maintenance margin with TCH, and must maintain the value thereof throughout the period that it has a derivatives position.

- Maintenance margin for the derivatives position in each contract month. TCH will
  calculate the value of margin that must be deposited by the member according to the
  rate of maintenance margin in accordance with the rules, procedures and conditions
  prescribed by it.
- Inter-month spread maintenance margin. TCH will calculate the value of margin that must be deposited by the member by using the inter-month spread maintenance margin rate in accordance with the rules, procedures and conditions prescribed by it.

#### 2. Variation Margin

At the end of every trading day, TCH shall calculate the gain or loss arising from the futures positions, futures trades in the member's house account or client account, and notify the member to deposit a variation margin. When the member is notified by TCH according to paragraph one, the member must deposit cash with the TCH as a variation margin.

# 3. Additional Margins

When TCH reviews the market condition as a whole and finds that the member has an increased risk due to its derivatives position that may adversely affect TCH, TCH shall notify the member to deposit the additional margins such as Super margin, Concentration margin and Uncovered risk margin. TCH may prescribe additional conditions for the requirement of additional margins under various circumstances as TCH considers appropriate.

For AFET, clearing members that use the clearing services of the Clearing House must deposit an Initial Margin (IM) with the Clearing House. Cash, government bonds or other securities shall be deposited as IM in the ratio prescribed by the Board. Cash deposits shall not be less than 50% of the IM, and deposits of other securities shall not exceed 25% of the IM. Government bonds or other securities shall be readily available in cash and shall be marked to market based on the risks as prescribed by the Board.

Clearing members using clearing services shall maintain the margins in their margin accounts in compliance with this Regulation. Any clearing member having a margin in its margin account which is less than the Maintenance Margin (MM) as at the end of a particular business day shall deposit cash as an additional margin in order to achieve a margin balance in the margin account that is equal to the IM rate prescribed by the Board within the period prescribed by the Exchange, which shall be no later than the following business day prior to the opening hours of the Exchange.

# VII. DISCLOSURE REQUIREMENTS

# • What are the disclosure requirements for derivatives instruments issuers?

For any derivatives instruments, the exchanges will disclose relevant information regarding contract specifications as follows;

- contract type
- o underlying assets/ variables
- o contract size/ unit/ multiplier
- o settlement month
- o price quotation
- o minimum price fluctuation/ movement
- o daily price limit
- trading hour
- last trading day
- o settlement day
- position limit/accountability
- o settlement method
- settlement price
- exercise price

# • What are the point-of-sale disclosure requirements for intermediaries?

Both SEC and AFTC require the intermediaries to explain any risks relating to derivatives trading to their clients and have their client sign in the Risk Disclosure Statement for Trading in Derivatives Exchange prior to opening the trading account including;

- Nature of derivatives contract (e.g. Futures/ Options)
- Risk of Loss in Trading Futures
- Additional Risks and Other Information Concerning Futures and Options Trading
- Understanding Terms and Conditions of Derivatives Contract
- Fees on Derivatives Trading
- Risk of Liquidating Position and Liabilities for Resulting Loss
- o Risk Associated with Failure to Offset Position
- Risk Associated with Failure to Execute Stop Loss Order
- o Risk from Position Restriction or Prohibition, etc.

In addition, all intermediaries must ask their clients to complete the suitability test in order to assess clients' risk-taking capability and informs the assessment result to them. Clients are required to provide personal information such as;

- o Age
- o Education
- o Value or assets and saving for purpose of securities investment
- o Prior investment experiences
- o Investment objectives

- The target investment period
- o Appropriate acceptable risk level
- o Acceptable amount of investment loss
- Ability to accept foreign exchange risk

# VIII. RATINGS

# • Are there rating requirements for issuers or products?

There are no rating requirements for issuers, products and investor groups that can invest in derivatives.

# **IX.OTHER ISSUES**

# • Are there any restrictions for individual investors to invest in derivatives?

According to the BOT's foreign exchange control regulations, non-resident (NR) trading in currency futures is prohibited. "Non-resident (NR)" means:

- o Corporations, institutions, funds, financial institutions or juristic persons located outside Thailand
  - o Entities of foreign governments located outside Thailand
  - o Branches and agents of domestic juristic persons located outside Thailand
- $_{\odot}$  Natural persons not of Thai nationalities and not having alien identity or residence permits.

However, non-residents exclude:

- o Thai embassies, Thai consulates or other entities of Thai government located outside Thailand
- o Foreign embassies, foreign consulates, specialized agencies of the United Nations, international organizations or institutions (both financial and non-financial) located in Thailand
  - o Branches and agents of foreign juristic persons located in Thailand

# X. ROLE OF SROS IN THE DERIVATIVES MARKET

# • Are SROs involved in any aspect of the derivatives market, such as regulating the OTC trading, disclosure requirements, data publication, etc.?

The Association of Thai Securities Companies further expand its role in derivatives market by establishing the Futures Industry Club (FI Club) in December 2005, with the objectives of promoting development and setting operating standards of the futures industry, in both principle and practice. The club also serves as the center of coordination and cooperation among the members in solving problems related to futures trading, settles disputes among members or with outside parties regarding futures trading, represents the members in coordinating with agencies concerned and ensures that the members comply with the Club's rules, regulations and operating standards for Futures Trading Business. Some of the standard imposed by the Club including fixing the margin multiplier for derivatives products, as well as the suggested commission rates, incentive scheme for marketing staff and margin all and force close procedures, etc.

# **DERIVATIVES MARKET IN TURKEY**

# I. REGULATORY FRAMEWORK

# • Main regulator for the derivatives market

The main regulator of the derivatives markets in Turkey is the Capital Markets Board (CMB).

### • Major regulations

CMB's "Communiqué About the Establishment and Working Principles of Derivatives Exchanges" lays down the main principles about the functioning of derivatives exchanges in Turkey.

Company Warrants are subject to the Communiqué Serial: III No.:36 "Principles Regarding the Board Registration and Trading of Company Warrants".

Covered Warrants are subject to the Communiqué Serial: III No.:37 "Principles Regarding the Board Registration and Trading of Covered Warrants".

# • Types of derivative instruments defined in the legislation

Futures and option contracts are defined in the CMB's Communiqué About the Establishment and Working Principles of Derivatives Exchanges.

Company and covered warrants are defined in the CMB's Communiqué Serial: III No:36 and No:37.

# Types of institutions that can issue derivatives.

Futures contracts are created by the exchange on which they trade. Specifications of these instruments are determined by the exchange and approved by the CMB.

Companies listed on the Istanbul Stock Exchange can issue company warrants.

Domestic or foreign intermediary institutions can issue covered warrants. There can be more than one warrant issuer for the same underlying asset.

# • Types of intermediaries that can trade derivatives

Banks, brokerage firms and derivatives brokerage firms are allowed to trade on the Turkish Derivatives Exchange. Intermediary institutions are required to obtain "Derivatives Trading License" from the CMB to offer this service. In the warrants market, only brokerage firms are authorized to trade.

# II. SIZE OF THE DERIVATIVES MARKET

### In which markets derivatives are traded?

In Turkey, derivative contracts are traded on over the counter and the regulated markets.

There are two regulated exchanges for these instruments. Futures contracts are traded on the Turkish Derivatives Exchange Inc. (TurkDex). TurkDex became operational in February 2005.

Covered warrants are being traded on the Istanbul Stock Exchange (ISE), since August 2010.

Company warrants are defined in the legislation in 2009, but there has not been any issue of company warrants yet.

# Types of derivative instruments

<u>Futures Contracts:</u> As of December 2011, only futures contracts are traded on the TurkDex. Current contracts are as follows:

- 1. Currency futures (TL/US\$, TL/€ and €/\$),
- 2. Interest rate futures (Benchmark Government Bonds),
- 3. Equity index futures (ISE-30, ISE-100 indices and ISE 30-100 Index Spread),
- 4. Commodity futures (cotton, wheat, TL/gr gold, USD/ounce gold, base load electricity).

<u>Covered Warrants</u>: Covered warrants are traded on the Istanbul Stock Exchange. Equities (included in the ISE-30 index) and ISE-30equity index are the underlying assets of covered warrants. Warrants can be either American or European style. Both call and put warrants are traded on the market. Warrants' maturity cannot be less than two months or more than five years.

# Historical, annual statistics of the last 5 years

<u>Futures Contracts:</u> The futures market has been growing steadily since its launch in 2005.

Trading volume in the futures market decreased by 8% to US\$ 265 billion in 2011 compared to 2010. Trading is concentrated mainly in the ISE-30 index contracts. US\$/TL currency contracts come in second place.

Futures Market Trading Volumes								
	2007	2008	2009	2010	2011			
No. of Contracts	24,867,033	54,472,835	79,431,343	127,898,770	148,574,947			
Index	17,016,913	40,334,968	65,399,748	63,952,177	74,287,630			
Currency	7,849,609	14,110,292	13,912,680	56,519,304	54,627,364			
Commodity	401	420	564	7,279,797	18,898,683			
Interest Rate	110	27,155	118,351	147,492	761,270			
Trading Volume (mn. \$)	90,759	160,669	216,024	287,916	264,509			
Index	82,740	145,425	201,005	279,861	242,373			
Currency	8,017	15,165	14,631	7,440	20,264			
Commodity	0	77	384	581	1,871			
Interest Rate	3	3	3	33	2			
Source: TurkDex								

<u>Covered Warrants:</u> Covered warrants have been trading on the ISE since August 2010. As of end-2011, the number of listed warrants reached 175 with US\$ 2,8 billion trading volume.

Warrants Market								
	No. of	Trading	No. of					
	Warrants	Volumes (mn. \$)	Investors					
2010	22	367	1,432					
2011	175	2,804	2,457					
Source: I	SE, CRA							

# • <u>Types of derivative instruments available in the OTC market. Historical statistics, if available.</u>

Swaps (mainly currency and interest rate), forward contracts and option contracts are the major derivatives instrument available in the OTC market. Mostly banks and brokerage houses make forward, swap and option agreements.

Derivatives Transactions of Banks (bn. \$)								
	2008	2009	2010	2011/09				
Currency Swaps	32.8	36.6	57.6	70.3				
Interest Rate Swaps	10.4	17.6	22.6	38.7				
Options	6.6	13.3	22.3	35.4				
Forwards	9.5	10.3	16.5	28.2				
Other Derivatives	6.9	8.2	11.5	14.0				
Total	66.2	86.0	130.5	186.6				
Source: BRSA								

Almost all derivatives transactions (99%) done by the banks are over-the-counter. Currency and interest rate swaps are the most used derivatives products in the OTC market. As of September 2011, total derivatives transactions reached US\$ 187 billion.

# III. ISSUING DERIVATIVE INSTRUMENTS

# • <u>Conditions for issuers (issuer restrictions, capital restrictions, rating</u> requirements etc.)?

<u>Futures Contracts:</u> Executive Board of the Turkish Derivatives Exchange defines the specifications of derivatives contracts and submits to the CMB for approval. There are no criteria for underlying instruments.

Minimum requirements of futures and option contracts are determined in the by-laws of the exchange. Underlying instrument, type of the contract, contract size, daily price limit, payment style etc. are the minimum requirements to be defined for listed contracts on the TurkDex.

<u>Covered Warrants:</u> In Turkey, covered warrants can be issued by intermediary institutions. These institutions should have been assigned a long-term credit rating of the top-three ratings grade by a national or an international credit rating agency recognized by the CMB. If the intermediary institution does not meet the rating condition, it has to have its settlement obligations guaranteed by an intermediary institution which fulfills the rating criteria. The issuer and the guarantor shall be jointly responsible for fulfilling the settlement obligations. Sale period of warrants can be determined freely by the issuer.

Underlying instruments of the warrants can be the ISE indices, single equities or basket of equities which are included in the ISE 30 Index. Warrants' maturity cannot be less than two months or more than five years.

# Summary of the issue process.

<u>Futures Contracts:</u> As mentioned before, the specifications of the futures contracts are determined by the exchange on which they trade.

The Product Development Committee of the TurkDex offers suggestions on the design of new contracts to be traded on the exchange. The Committee consists of TurkDex employees and representatives of the exchange members. The decisions of the Committee are advisory.

Upon these suggestions, the Executive Board determines the specifications of derivatives contracts and applies to the CMB for approval. After the approval, the contract is introduced to the market.

<u>Covered Warrants:</u> The brief issue process of warrants is as follows:

# 1. Appoint a Market Maker

The issuer should appoint a brokerage firm as a market maker.

# 2. Registration with the CMB

Warrant issuers are required to submit their shareholder structure, articles of incorporation, last two years' financial statements, prospectus, circulars, etc. to the CMB during registration.

The warrant issue applications may be carried out separately for each issue, or it may cover all warrant issues to be made within a year.

# 3. Listing on the ISE

After receiving registration certificate, the issuer applies to the ISE to be listed. If the issuer of warrants is a foreign institution, it should additionally apply to the Ministry of Finance for approval.

# IV.COSTS OF ISSUES

 Are there problems with the costs of issuing derivatives? Mainly regulatory costs, such as fees paid to the regulator, exchanges or other authorities and institutions

<u>Futures Contracts:</u> There is no regulatory cost of introducing a contract at TurkDex. Nevertheless, sometimes there may be some consultancy expenses or IT infrastructure expenses for new contracts.

<u>Covered Warrants:</u> Currently, covered warrants are traded on the Warrants Market of the ISE. The initial listing fee for covered warrants is 0.01% of the total nominal value of the warrants. This value cannot exceed TL 1,000 ( $\approx$  US\$ 545). Moreover, TL 500 ( $\approx$  US\$ 273) listing fee is charged per issue. For each issuer, total listing fee cannot exceed TL 50,000 ( $\approx$  US\$ 27,300) in a year. There is no annual listing fee for warrants.

The registration fee to be paid to CMB is determined according to the maturity of the warrants:

- > 0.05% of the nominal value of the warrants with 180 days to maturity,
- > 0.07% of the nominal value of the warrants with maturities between 181 days and 1 year -including 1 year,
- ➤ 0.1% of the nominal value of the warrants with maturities between 1 and 2 years-including 2 years,
- > 0.2% of the nominal value of the warrants with more than 2 years to maturity.

For custody services, the issuer should pay TL 20,000 ( $\approx$  US\$ 10,900) to Central Registry Agency as initial registration fee. Besides, 0.01% of the nominal value of the warrant is paid (maximum TL 1,500) as dematerialization fee. The annual custody fee is 0.01% of the market value of the covered warrant.

# V. TRADING

# Where does trading take place; exchanges or OTC?

Trading takes place in the OTC market, the Turkish Derivatives Exchange and the Istanbul Stock Exchange.

Generally, banks and brokerage firms make forward and option agreements in the OTC market.

<u>Futures Contracts:</u> On TurkDex, trading is done on a multiple price, continuous auction method. The computerized system automatically matches orders based on price and time priority.

TurkDex is open from Monday to Friday. There is a single session, held between 9:15 and 17:35. Last 10 minutes of the session is called the "closing period". Settlement prices are announced at 17:45.

<u>Covered Warrants:</u> On the ISE, warrants are traded by market making system. Warrants are traded during the continuous auction of the Stock Market. The first session is between 09:50-12:30 and the second session takes place between 14:20-17:30 hours.

#### • <u>Is there market-making?</u>

<u>Futures Contracts:</u> In TurkDex, there are market makers which are authorized by the Exchange.

A member may be a market maker in more than one contract. Additionally, there may be more than one market maker for a contract. Market making may be implemented in particular contract or all contracts listed on the Exchange.

Currently, market making is applied for cotton futures, gold futures and foreign currency futures contracts.

Market makers should meet minimum capital requirements determined by the TurkDex. Related requirements may be different for different contracts. For example, minimum capital requirement for cotton and gold futures contracts are TL 5 million ( $\approx$  US\$ 2.7 million, whereas for currency futures contracts the minimum capital requirement is TL 300 million ( $\approx$ 

US\$ 164). Market makers should be among the top 50 members in trading volume of related contracts.

As of end 2011, there are 6 market makers for currency futures, 2 market makers for cotton and gold futures each.

<u>Covered Warrants:</u> Each warrant has to have a market maker. A member can be the market maker of more than one warrant. No order entry is allowed for warrants before the market maker enters a quotation.

Market making members should;

- 1. have the "Derivatives Trading License",
- 2. have an equity capital of more than TL 15 million (≈US\$ 8,1 million),
- 3. have an effective internal control system,
- 4. have adequate number of directors and expert staff,
- 5. have submitted to the CMB the special independent audit report regarding operations and compliance with the internal control systems,
- 6. employ one full-time executive holding the "Derivatives License" and "Advanced Level License".

# • Who are investing in or trading? Domestic retail, corporate, institutional or foreign investors.

<u>Futures Contracts:</u> The Association of Capital Market Intermediary Institutions of Turkey (TSPAKB) publishes data on the structure of trading volumes in different markets. The figures are compiled from the brokerage firms only and exclude the transactions of the banks. Noting that, brokerage firms have an 85% share in the futures trading volume in 2011.

Domestic individual investors are the most active group in brokerage firms' futures transactions. They generate two thirds of the trading volume in 3Q2011.

Foreign investors generated 17% of brokerage firms' futures transactions in 3Q2011.

Investor Breakdown of Futures Trading Volume									
	2006	2007	2008	2009	2010	2011/09			
Domestic Investors	89%	79%	82%	92%	89%	83%			
Dom. Individual	51%	57%	65%	77%	75%	66%			
Dom. Corporation	37%	19%	15%	13%	11%	13%			
Dom. Institutional	1%	2%	2%	1%	2%	4%			
Foreign Investors	11%	21%	18%	8%	11%	17%			
For. Individual	0%	0%	0%	0%	0%	0%			
For. Corporation	10%	9%	9%	4%	5%	9%			
For. Institutional	1%	12%	9%	4%	6%	7%			
Total	100%	100%	100%	100%	100%	100%			
Source: TSPAKB									

<u>Covered Warrants:</u> Domestic individuals and foreign corporations are the major group providing market liquidity. The transactions of foreign corporations reflect the market making activities.

Investor Breakdown of Warrants Trading Volume							
	2010	2011/09					
Domestic Investors	59%	59%					
Dom. Individual	48%	43%					
Dom. Corporation	11%	15%					
Dom. Institutional	0%	0%					
Foreign Investors	41%	41%					
For. Individual	0%	0%					
For. Corporation	41%	41%					
For. Institutional	0%	0%					
Total	100%	100%					
Source: TSPAKB							

#### VI.CLEARING AND SETTLEMENT

#### Is there a CCP?

<u>Futures Contracts:</u> Istanbul Stock Exchange Settlement and Custody Bank Inc. (Takasbank) acts as the central counter party and guarantees the settlement of futures transactions. But the guarantee is limited to the collateral taken from the members and the size of the guarantee fund.

Guarantee fund, which is managed by Takasbank, is used in case of member defaults. Clearing members must contribute to the Guarantee Fund. In case of default, the defaulting member's contribution is used first and, if necessary, then non-defaulting members' contributions are used on a pro-rata basis.

<u>Covered Warrants:</u> There is no CCP for warrants. Takasbank is used for the settlement of trades on the ISE.

# Clearing institution and process.

<u>Futures Contracts:</u> All clearing and settlement activities of the TurkDex are handled by Takasbank.

TurkDex system has an online, real-time connection with the Takasbank, which allows the monitoring of all orders, transactions, margins and positions on a client account basis. This means that margins are also monitored on account basis. However, although the margins are followed on account basis, clearing members are responsible for the margin calls.

When orders are entered, the TurkDex system checks the adequacy of the margin at the moment of trade through its online connection with the Takasbank. Order entry is possible without the required margin; however it is not executed if there isn't sufficient collateral at the client account.

# • Collateral requirements.

<u>Futures Contracts:</u> Margins are deposited at the Takasbank. Since all transactions are executed and monitored on account basis, margin must be deposited on account basis too. Trade margins are categorized into three groups:

Initial Margin: The margin required to take any open position is called the initial margin. Initial margin is specified for each contract. Lower margin requirements may be set for calendar spread positions.

Maintenance Margin: It is the minimum margin to be carried due to losses incurred on positions or depreciation of the non-cash collateral. If trade margin drops below the maintenance margin, Takasbank places a margin call to its members on account basis.

Extraordinary Margin: The Exchange may request additional margins under extraordinary circumstances.

Assets accepted as margin collateral are:

- Turkish Lira (TL),
- Foreign currency (USD, EUR),
- Foreign currency indexed bonds,
- · Government bonds, Treasury bills and Eurobonds,
- Equities (included in ISE-30 Index),
- ETFs and mutual funds.

At least 30% of the total collateral must be deposited in cash. All non-cash collateral is subject to haircuts determined by the Takasbank. Collateral is marked-to-market daily by the Takasbank.

# • Settlement institution and process (cash settlement and physical delivery).

<u>Futures Contracts:</u> The clearing and settlement of transactions are mainly on a cash settlement basis. Physical delivery is also possible for currency contracts.

Each trading day, the TurkDex announces the settlement prices at 17:45. Then, Takasbank starts marking-to-market on account basis, and announces margin call amounts for relevant accounts.

Members should fulfill their margin requirements by 14:30 on the following day (T+1) for cash settlement obligations.

If the margin calls are not fulfilled by the member until the clearing period ends, that member is deemed to be in default. In that case, the defaulting member should pay a penalty. Moreover, open positions of the defaulting account or the defaulting member's account can be off-set, non-cash collaterals can be liquidated, the defaulting member's Guarantee Fund contribution can be used or other measures can be taken.

Settlement period for obligations arising from "physical delivery" of futures contracts ends at 16:30 on T+2.

<u>Covered Warrants:</u> Settlement of warrants is handled by the Takasbank. The settlement principles are the same as in the ISE Stock Markets. Settlement day is T+2 through delivery-versus-payment (DVP) system.

At the end of each trading day, ISE transmits details of all transactions to the Takasbank. Takasbank multilaterally nets the settlement positions, determines the obligations of each broker in each security, and calculates their net cash position.

The net settlement position on client basis is transmitted to the Central Registry Agency (CRA) on the trade day (T+0). Details of netting are available to brokers electronically on T+0, showing also settlement amounts due. At the end of the day, the securities of the delivering clients are blocked automatically by the CRA for settlement purposes.

On T+2, the securities of the delivering clients are transferred from the blocked settlement account to the settlement account of the broker within the CRA system. Securities are transferred to client sub-accounts by the CRA.

Brokers are expected to fulfill their cash obligations through their cash accounts at Takasbank from 09:00 to 16:00.

A party which fails to meet its obligations on T+2 until 16:00 is considered as having failed according to the ISE regulations. ISE members have the option to settle their dues on until 09:15 on T+3, by paying a default penalty interest. If settlement does not occur until 9:15 on T+3, the ISE initiates a buy-in process on behalf of the failing member. The buy-in auction is held during the first trading session on T+3, with same-day settlement. Price differentials are paid by the failing member.

OTC Market: Settlement procedures and value date in the OTC market are determined between parties.

# VII. DISCLOSURE REQUIREMENTS

# What are the disclosure requirements for derivatives instruments?

<u>Futures Contracts:</u> Before introducing the futures contracts, TurkDex announces the launch and specifications of the contracts in its Official Exchange Bulletin. TurkDex also discloses the post trading information, including settlement price, weighted average price, trading value and open interest etc. on its daily bulletins.

The disclosure requirements for covered warrants are described as below.

# • What are the disclosure requirements for derivatives instruments issuers?

<u>Covered Warrants</u>: In the offering prospectus, financial status of the issuer and the guarantor (if any), the results and scope of their activities, principles governing guarantee (if any), risks and attributes of issued warrants and the principles of sale should be disclosed. Moreover, settlement type and issue, and all other important information which may affect the decisions of investors should be defined in detail.

After covered warrants are listed on the stock exchange, the issuer should disclose changes in terms and conditions which may have a potential impact on the price of the warrants.

# • What are the point-of-sale disclosure requirements for intermediaries?

<u>Futures Contracts:</u> The intermediary institutions have to have the "derivative instruments risk information statement" read and signed by their clients before they start trading. The content of this statement is determined by the CMB. It defines the structure of these instruments and explains the risks of such transactions. The intermediaries should give a copy of this statement to customers.

<u>Covered Warrants:</u> As in futures contracts, the intermediary institutions have to have the "risk notification form for warrants" read and signed by their clients before they start trading. This form explains the working principles, rights and obligations of warrants and the risks of such transactions. The content of this statement is determined by the Association of Capital

Market Intermediary Institutions of Turkey (TSPAKB). The institutions should provide this notification form to customers.

# VIII. RATINGS

Are there rating requirements for issuers or products?

The issuer of covered warrants must have a long-term rating of at least A, assigned by a national or an international credit rating agency recognized by the CMB.

• Are there rating requirements for investor groups (institutional, individual) that can invest in derivatives

There is not any rating requirement for derivatives investors.

# **IX.OTHER ISSUES**

• Are there any restrictions for individual investors to invest in derivatives?

There is no restriction to invest in futures contracts or covered warrants for individual investors. On the other hand, there is a limitation on derivatives transactions for pension funds. The covered warrants should not exceed 15% of the assets of the pension fund. Not more than 10% of the fund assets can be invested in the same underlying assets of the warrants.

# X. ROLE OF SROS IN THE DERIVATIVES MARKET

• Are SROs involved in any aspect of the derivatives market, such as regulating the OTC trading, disclosure requirements, data publication, etc.?

<u>Covered warrants:</u> As a SRO, TSPAKB has formed the content of the "risk notification form for warrants". This form explains the working principles, rights and obligations of warrants and the risks of such transactions.

# XI.RECOMMENDATIONS FOR THE DERIVATIVES MARKET

 Recommendations for the development of the derivatives markets in your jurisdiction, including proper management of the risks in the market.

There is a need for clear-cut rules and regulations about the OTC derivatives.

However, the main issue is the low range of available derivatives products in the OTC and regulated markets. Exchange-traded options and single-stock futures are not available in the markets yet, but there are studies to introduce them in the near future.

Besides, other types of derivatives instruments like contracts for differences (CFD) are not defined in the legal framework.

On the other hand, recently TurkDex has been introducing new futures contracts such as electricity, live cattle and index spread futures. But trading is still concentrated in the ISE-30 index contracts.

Moreover, taxation is asymmetric among contracts. For instance, withholding tax rate is 0% for contracts based on equities and equity indices, whereas it is 10% for other contracts.

#### References:

Capital Markets Board: <a href="www.cmb.gov.tr">www.cmb.gov.tr</a>
Istanbul Stock Exchange: <a href="www.ise.org">www.ise.org</a>
Central Registry Agency: <a href="www.mkk.com.tr">www.mkk.com.tr</a>

Takasbank (Settlement & Custody Bank): www.takasbank.com.tr

Turkish Derivatives Exchange: www.turkdex.org.tr

# COMPARATIVE COUNTRY INFORMATION

The Questionnaire	he Questionnaire of ICSA Emerging Markets Committee on Derivatives Markets in Emerging Countries 2012						
	Brazil	Bulgaria	Korea	Mexico	Thailand	Turkey	
Main Regulator of Derivatives Market	*Brazilian Securities Commission *Brazilian Monetary Council (for OTC transactions)	*Financial Supervision Commission	*Financial Services Commission (FSC) *Financial Supervisory Service (FSS) *Korea Exchange (KRX) *Korea Financial Investment Association (KOFIA)	*Central Bank of Mexico *National Banking and Securities Commission (CNBV) *Ministry of Finance and Public Credit (SHCP)	*Securities and Exchange Commission (SEC) *Thailand Futures Exchange (TFEX) *Bank of Thailand (BOT) (for OTC trading) *The Agricultural Futures Trading Commission (AFTC) *Agricultures Futures Exchange of Thailand (AFET)	*Capital Markets Board (CMB) *Turkish Derivatives Exchange (TurkDex) *Istanbul Stock Exchange (ISE)	
Types of Derivatives Instruments Traded in Exchanges	*Index Futures *Interest Rate Futures *Exchange Rate Futures *Commodity Futures	*Warrants	*Forwards, Futures, Swaps, Options -Underlying Assets: equity, interest rate, currency, credit, commodity, exotic (life expectancy, excess death rate, etc.)	*Futures Contracts (Currency, Index, Interest Rates, Single Stocks) *Option Contracts (Currency, Index, Single Stocks)	*Index Futures and Options *Single Stock Futures *Commodity Futures *Currency Futures *Agriculture Futures (in AFET)	*Currency Futures *Interest Rates Futures *Equity Index Futures *Commodity Futures *Covered Warrants	
Types of Derivatives Instruments Traded in OTC	*Swaps *Options	-	*Forwards, Swaps, Options -Underlying Assets: equity, interest rate, currency, credit, commodity, exotic (life expectancy, excess death rate, etc.)	*Swaps *Forwards	*Currency Derivatives *Interest Rate Derivatives *Bond Derivatives *Index Derivatives *Commodity Derivatives	*Swaps (mainly currency and interest rate) *Forwards *Options	
Size of Total Derivatives Market (Exchange/ 2011-mn. \$)	*3,094,977 -90% in interest rate contracts	*0.98	*66,591,197 (2010) -60% in equity options	*375,723 -73% in interest rate futures	*193,085 -60% in index futures	*267,313 -90% in index futures	

The Questionnaire	of ICSA Emerging Ma					1
	Brazil	Bulgaria	Korea	Mexico	Thailand	Turkey
Size of Total Derivatives Market (OTC/ 2011-mn. \$)	*647,395 -90% in swaps	-	*13,784,119 (2010) -70% in currency forwards	*18,431,544	*366,486 -55% in currency derivatives	*186,600 -60% in currency and interest rate swaps
Market Makers	*For equity options, market making is allowed	-	-	*Market makers approved by MexDer	*There is market maker in TFEX, but none in AFET	*Market maker for covered warrants
Clearing Institutions	*BM&FBovespa (also CCP for exchange trades)	*Central Depository of Securities	*Korea Exchange (also CCP for exchange trades)	*Asigna, Compensación y Liquidación (also CCP for exchange trades)	*Thailand Clearing House (also CCP for TFEX transactions) *AFET (for transactions on AFET)	*Takasbank (also CCP for TurkDex trading)
Settlement Institutions	*BM&FBovespa and CETIP	*Central Depository of Securities	*Korea Securities Depository	*Asigna, Compensación y Liquidación	*Thailand Clearing House *AFET (for transactions on AFET)	*Takasbank (TurkDex trading) *Central Registry Agency (for covered warrants)
Collateral requirements	*Cash, debentures and banks CDs etc.	-	-	*Cash, securities	*Cash, government bonds or other assets	*Cash, government bonds, equities, ETFs, mutual funds
Disclosure Requirements for Issuers	*Financial information statements *Derivatives positions for financial institutions and funds	-	-	*Several information such as the book value of financial assets and liabilities related to derivative products with negotiation purposes etc. through notes to financial statements	*Information on contract specification such as contract type, underlying asset, contract size, multiplier, settlement month, price quotation, minimum price fluctuation, etc.	*For covered warrants, financial status of the issuer and the guarantor (if any), the results and scope of their activities, principles governing guarantees (if any), risks and attributes of issued warrants and the principles of sale

	Brazil	Bulgaria	Korea	Mexico	Thailand	Turkey
Point of Sale Disclosure Requirements for Intermediaries	*Suitability requirements (for all traded securities)	-	*Explanation note on derivatives (KOFIA sets the requirements) *Cautionary notification regarding risks *Limit on property gains of an investor.	*Suitability tests *Risk information notes (Financial institutions are not allowed to offer derivative products directly at their branches)	*Suitability test *Risk Disclosure Statements	*Derivative Instruments Risk Information Statement *Risk Notification Form for Warrants
Other Disclosure Requirements	-	*Intermediaries publish price quotes (exchange and OTC)	*FSS, KRX and KOFIA require issuers to publish quarterly operating reportsThe reports shall include information on financial accidents, civil suits, regulators' recommendations, changes in financial structures, debt, profit, loss etc.	*MexDer publishes through its website a broad range of useful market information for investors, such as statistics, market summary, futures and options bulletins and others	*TFEX discloses all relevant information about the contracts. *Currency futures trading for non- residents is prohibited.	-
Role of SRO	*Exchanges monitor adherence with contracts and to pricing *CETIP is responsible for verifying the correspondence of contracts *ANBIMA monitors adherence of members to suitability rules, promotes the standardization of the bilateral contracts	-	*KOFIA sets regulations on the Operation and Review of the OTC Derivatives and Standards for Management of Derivatives Risk Limit	*MexDer and Asigna are both entitled to act as "market authorities" for all the trading, allocation, clearing and settlement procedures	*The Association of Thai Securities Companies established a Futures Industry Club which aims to develop and set standards of the futures industry	* TSPAKB has formed the "risk notification form for warrants"