ALL VALUES ARE TRADED AT KRX

# G L O B A L P R E M I E R EXCHANGE



# **ALL VALUES ARE TRADED AT KRX**

There is a comprehensive global exchange that has led the growth and development of the Korean capital market. It's KRX, an exchange that has grown to become the world's 15th largest in only 60 years.

Today, KRX is preparing for significant paradigm shifts in the world capital market through greater innovation. It is advancing step by step to solidify Korea's financial future by building solid confidence in stable and efficient market operation, by accommodating diverse needs of financial consumers through open communication, and by stepping up to the bold challenge of sharing its expertise with overseas exchanges. KRX will not cease to innovate itself to become a global market place where all instruments of value in the world come together to create greater value.

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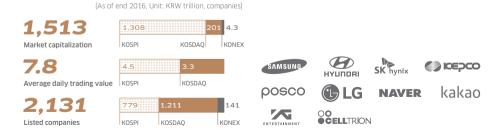
# GLOBAL KRX

## A TOTAL MARKET WITH A COMPREHENSIVE PRODUCT LINEUP INCLUDING STOCKS, BONDS, DERIVATIVES, STRUCTURED PRODUCTS AND COMMODITIES

KRX provides investors with efficient means to manage assets by offering a single platform where an extensive product line-up, ranging from stocks and bonds to derivatives, ETFs, ETNs and commodities (gold, emissions, etc.), can be traded while minimizing transaction costs, and hedging investment risks.



From blue-chip companies in traditional sectors, such as electronics, machinery, automobile and oil refining, to diverse companies in future-oriented, high growth industries, such as IT, semiconductors, biotechnology and entertainment, a broad array of companies are listed on KRX. KRX has been enjoying a strong presence of foreign investors, with holdings of up to KRW 481.5 trillion at the end of 2016 and a continuous increase in number and nationalities of global investors.



# ADVANCED MARKET

KOSPI

FTSE'S CLASSIFICATION OF KOREA AS A DEVELOPED MARKET IS A RECOGNITION OF KRX'S ADVANCED MARKET POLICIES AND TRADING ENVIRONMENT

FTSE has classified Korea as a developed market since September 2009, indicating not only that KRX has evolved to the status of advanced, top-tier global markets in terms of size, but also that its policies and trading environment are mature.

## COLLABORATION WITH S&P TO MARKET KRX INDICES GLOBALLY

KRX currently calculates over 130 indices, including KOSPI 200. The size of assets of the index funds and derivatives linked securities based on KOSPI 200 amounts to KRW 60 trillion. In collaboration with S&P, KRX is pursuing the global marketing of its indices to investors worldwide. Global investors have easy access to the Korean market through diverse products based on KRX's indices.



#### TRADING LINKAGES WITH CME AND EUREX FOR KOSPI 200 FUTURES AND OPTIONS

By linking KOSPI 200 Futures with CME Globex and KOSPI 200 Options with Eurex, KRX created a global market that allows 24-hour trading of KOSPI 200 derivatives. Separately, KRX launched the global USD futures market in November 2014 to provide means of managing the risk of exchange rate fluctuations afterhours. In view of the increasing importance of the Asian market in the global marketplace, KRX has listed futures of Eurex's leading index derivatives product, EURO STOXX 50, on its market in June 2016. Likewise, it has listed Mini KOSPI 200 futures on Eurex in November 2016.

GLOBAL KOSPI 200 MARKETS: AVERAGE DAILY TRADING VOLUME

**11,733** contracts **87,778** contracts KOSPI 200 Futures. 2016 (CME) KOSPI 200 Options. 2016 (EUREX)

# INNOVATIVE IT INFRASTRUCTURE

# CONTINUITY OF MARKET OPERATIONS UNDER ANY CIRCUMSTANCES

- Software technology based on fault-tolerant architecture, triplication of hardware, and installation of a disaster recovery system
- 24-hour monitoring against faults and infiltration by the Integrated IT Control Center
- Information protection management system with international ISO27001 certification

## INTEGRATED PLATFORM MAXIMIZING MARKET ACCESS AND IT OPERATIONAL EFFICIENCY

 KRX's platform integrates multiple markets, including securities and derivatives, into one and maximizes efficiency as well as user friendliness

## RDS FOR QUICK RESPONSE TO CHANGES IN THE MARKET ENVIRONMENT

• Reference data services (RDS) can be used to track diverse products or newly launched markets in a short period of time. Convenient server expansion allows quick and flexible response to abrupt changes in market conditions

# KRX EXTURE\*

## EXTURE<sup>+</sup>: WORLD-CLASS TRADING CAPABILITIES

- Breakthrough improvement in order processing speed and capacity
- Enhanced customer service with safety measures against misplaced orders (Kill-Switch) and limitations on excessive quotations
- World-class technology with core technology developed in-house to reinforce the competitiveness of the IT export business and promote the proliferation of Korean-style capital market models worldwide

# USER-ORIENTED CUSTOMIZED MARKET DATA SERVICES

 Integrative data distribution system for the next generation supports the customized market data services as well as globalization of your data service business

## EXCELLING PERFORMANCE

# THROUGHPUT LATENCY



# FAIR & TRANSPARENT MARKET

## A FAIR AND CREDIBLE MARKET IN WHICH INVESTORS CAN PARTICIPATE WITH TRUST

Real-time monitoring using state-of-the-art market surveillance systems and advanced transaction analysis techniques enable early detection of unfair transactions. KRX is also implementing preventive measures and activities, such as preventive education, request for inquired disclosure, and issuing of market, investor and cyber alerts.

# CONTINUOUS, MULTIFACETED EFFORTS TO PREVENT UNFAIR TRADING, SUCH AS EDUCATION AND CONSULTING

KRX provides individual investors, listed corporations and financial investment companies, etc. with preventive education services on topics such as market manipulation and insider trading. Through consulting services for listed corporations, KRX supports the establishment of internal control systems which are designed to deter unfair trading practices such as the use of undisclosed information in advance.

#### MARKET SURVEILLANCE

## FAIR AND TRANSPARENT MARKET

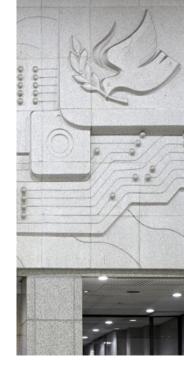
- Prevention of unfair trading
  - Preventive measures against unsound trading
  - Market warnings, request for inquired disclosure, and investor alerts
  - Education to prevent unfair trading and consulting for listed companies

## Investor protection (Relief of damages)

- Mediation of securities investment related disputes (http://drc.krx.co.kr)
- Litigation support for victims of unfair trading
- (http://help.krx.co.kr)

## Early stage detection of unfair trading

- Real-time market surveillance (monitoring)
- · Investigation of alleged unfair trading (trial)
- Operation of a call center for unfair trading
- (http://stockwatch.krx.co.kr)



Total Premium Market A comprehensive global market where diverse products are traded

Startup Market Establishment of a new market for startups **Diversification of Listed Products and Indices** Development of new indices and expansion of product lineup by market

> Advanced Market A globalized market catering to diverse participants at home and abroad

ALL VALUES ARE TRADED AT KRX

# GLOBAL PREMIER EXCHANGE

Fair & Transparent Market Fair and transparent market management through an efficient market surveillance system Global Market Active participation by global companies and investors

New Business Discovery of new business models

> Innovative IT infrastructure Development and export of world-class IT infrastructure

**Clearing Organization** CCP services for secure settlement in the securities and derivatives markets

# INFRASTRUCTURE FOR CORPORATE GROWTH

The KRX Startup Market (KSM), the M&A intermediation network, education and consulting services on listing, and support for crowdfunding are all part of KRX's onestop, growth support infrastructure to help startups, ventures, and small and medium-sized companies complete the full processes from founding to listing.

# **KRX Startup Market**

## KSM - A NEW TRADING PLATFORM EXCLUSIVELY FOR UNLISTED STOCKS OF STARTUPS.

In a bid to help startups to secure financing and investors to recover investments before IPO, KRX launched KSM in November 2016, a win - win platform for companies and investors to trade unlisted stocks of startup companies. A mobile application facilitates placement and monetization of investments in KSM, improving access to opportunities to invest in startup companies.



1

72%

Crowdfunded companies

# KRX M&A Network KRX SUPPORTS THE ACTIVATION OF THE DOMESTIC M&A MARKET BY ACCUMULATING AND UTILIZING INFORMATION ON M&A OF

STARTUPS, SMES AND HPES (HIGH POTENTIAL ENTERPRISES).

In an effort to support the establishment of a virtuous cycle of venture capital that leads to investment - exit - reinvestment, an M&A intermediation network which offers a one-stop services ranging from M&A matching to professional consulting (June 2016).

## KSM-Crowdfunding Seed Fund KRX CREATED A FUND TO STRENGTHEN ITS ROLE AS A CATALYST FOR CROWDFUNDING AND TO SUPPORT COMPANIES REGISTERED WITH KSM.

In December 2016, KRX created the KSM Crowdfunding Seed Fund (KRW 8 billion) together with SME-specialized securities companies, Korea Growth Investment Corporation, and the IBK Industrial Bank of Korea to promote crowdfunding and KSM.

# DIVERSIFICATION OF MARKETS AND INDICES

# КТОР 30

KTOP 30 IS A FLAGSHIP INDEX OF THE KOREAN STOCK MARKET THAT COMPRISES 30 BLUE-CHIP STOCKS.

KTOP 30 is comprised of a basket of stocks that were carefully selected by the Index Committee from KOSPI and KOSDAQ based on five criteria, including economic representativeness, market representativeness, and investor accessibility. In order to capture the trends in the entire market, it takes into consideration the balance by sector and responds flexibly to the changes in the structure of the economy, instead of being restrained by rigid quantitative standards.

In addition, it uses a stock price averaging formula that reflects stock price changes evenly on the index (stock price weighted index), allowing investors to easily predict the effect of stock price changes on the index. The basket of a few selected blue-chip stocks helps to demonstrate the growth potential of the Korean economy, raising prospects for future share price increases. KTOP 30 is expected to become a representative index of Korea's market and economy.



C

**KOSPI & KOSDAO** 

**TOP 30** 

-2

CO<sub>2</sub>/CH<sub>4</sub>

N<sub>2</sub>O/HFCs

PFCs/SF<sub>6</sub>

WITH THE LAUNCH OF THE EMISSIONS MARKET IN JANUARY 2015, KRX IS PROMOTING THE REDUCTION OF GREENHOUSE GASES AND INVESTMENT IN GREEN TECHNOLOGIES.

# Trading of emissions

Companies that exceed emissions quotas allocated by government can buy additional permits in the market from companies with leftover quotas.

KRX's emission market provides a trading platform where companies can trade permits as easily as stocks. Market participation will be extended to individuals and financial investment companies.



# GLOBAL BUSINESS

KRX has been demonstrating its excellence as an IT powerhouse through its active overseas deals, such as exporting capital market IT systems, establishing Korean-style stock markets overseas, and forging international cooperation.

- Building system linkages with overseas exchanges to improve market accessibility and investment convenience.
- Exporting securities market IT systems and capital market infrastructure to foreign markets in countries such as Malaysia, Thailand and the Philippines.
- Expansion of IT system export coverage to regions such as Eastern Europe, Middle East, Africa and South America.



#### CONSULTING FOR EMERGING MARKETS

- Consulting for the development of the Cambodia Securities Exchange sponsored by the Korea International Cooperation Agency (KOICA)
- Support for the European Development Bank (EBRD) to establish and promote derivatives markets in three countries (Romania, Ukraine, and Mongolia)
- Support for the establishment of a new exchange in the Astana International Financial Center (AIFC) in Kazakhstan



EXPORT IT SYSTEM

# Development completed: Malaysia, Philippines, Thailand, Azerbaijan, Uzbekistan Development in progress: Vietnam

#### JOINT MARKET OPERATION



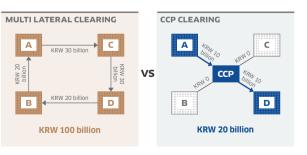
# OTC CLEARING SERVICE

# SIGNIFICANTLY IMPROVES THE STABILITY, EFFICIENCY AND TRANSPARENCY OF SETTLEMENT OF OTC DERIVATIVES.

In accordance with the agreements reached at the G20 Summit in Pittsburgh in September 2009 requiring standardized OTC derivatives clearing through a CCP\*, KRX launched clearing services for KRW denominated interest rate swaps\*\* in March 2014.

\*CCP (Central Counterparty): A central clearing house that guarantees the settlement of transactions by taking part in transactions as if it were an original party

\*\* Interest Rate Swap (IRS): OTC derivatives contract in which trading parties pay and receive interest in accordance with pre-agreed terms and conditions



#### CCP SERVICES FOR KRW AND USD IRSs.

KRX provides clearing and settlement services for KRW IRS and USD IRS traded in the OTC market using international standard risk management measures to manage counterparty default risks.

#### **BENEFITS OF CLEARING OTC DERIVATIVES THROUGH A CCP**

#### Reduction of systemic risk

Prevention of chain defaults in the event of a default by a company as payment and deliveries are guaranteed by the CCP.

Improved clearing & settlement efficiency

Reduction of settlement risk and workload through netting.

## • Eased capital requirements for financial institutions

Application of a lowered risk factor (2%)\* in BIS calculations.

\* KRX was recognized as a qualifying CCP by the financial regulatory body in September 2014 (a high, 20% to 100% risk weight factor is applied to trades that are not cleared through a CCP).

## AT A GLANCE

# TOTAL MARKET & PRODUCTS

From the securities market to the derivatives market and from KRX indices to OTC derivatives, KRX operates diverse markets and offers a wide range of products based on fairness and transparency.





Special purpose

acquisition

EQUITY

Depositary Receipts

Stocks

(DR)

Beneficiary certificates





# **EQUITY** MARKET

# KOSPI MARKET

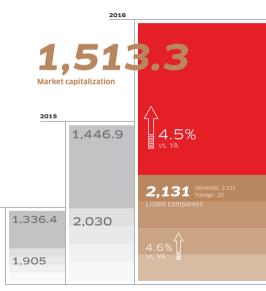
Since its opening in 1956, KOSPI, KRX's flagship market, has shared its history with that of the Korean economy and offers globally prominent companies such as Samsung Electronics, Hyundai Motor Company, POSCO and LG Electronics as its listed companies. The market capitalization of KOSPI amounted to KRW 1,308.4 trillion at the end of 2016.

# KOSDAQ MARKET

KOSDAQ is a new market opened in 1996 to provide growth opportunities to promising small and medium-sized enterprises and venture companies in industries such as information technology (IT) and biotechnology (BT). It is known as one of the world's most successful new markets with an annual trading value of KRW 500 trillion and a total of 1,211 listed companies.

## KONEX MARKET

KONEX was created in 2013 to build the foundation for a creative economy by supplying funds to small and medium-sized venture companies at their early stages. It completes the KONEX  $\rightarrow$  KOSDAQ  $\rightarrow$  KOSPI capital market structure that is designed to serve companies at each stage of growth and supports the virtuous cycle between the capital market and the real economy.



Market capitalization and number of listed companies [Unit: KRW trillion, companies]

2014

# **BOND** Market

# STRUCTURE OF THE KRX BOND MARKET

The KRX bond market consists of the wholesale market, which includes the Korean treasury bond market and the Repo market, and the retail market, which includes the general bond market and the small-lot public bond market.



Exchange vs. OTC traded bonds [Unit: KRW trillion]

## Wholesale markets

## Korean Treasury Bond (KTB) market

Established in March 1999, the KTB market operates with a primary dealer system to promote the issuance and trade of KTBs.
A highly transparent market on an electronic trading platform (Exture<sup>1</sup>) that allows participants (KTB dealers) to see quotations in real-time.

#### REPO market

- A repurchase agreement is a dual agreement under which a seller agrees to buy a bond back from a buyer at a specific price on a specified date.
- Trade structures of the KRX Repo market conform to the Global Master Repurchase Agreement (GMRA), the world standard for Repo transactions.

## Retail market

## General bonds market

- A market where all bonds (corporate bonds, equity-linked bonds and national housing bonds) are traded.
- Listed convertible bonds can be traded only on the KRX market, contributing to the enhancement of liquidity.
- Trading unit is set at a face value of KRW 1,000 to encourage participation of individual investors.

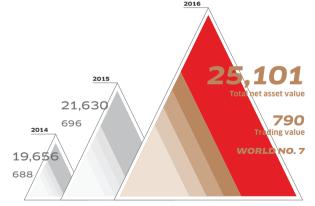
## Fractional bonds market

• Established to improve liquidity of government and municipal bonds that are mandatorily purchased by people when they buy houses or cars.

• KRX designates small-lot public bond dealers for liquid trading.

# SECURITIZED PRODUCT MARKET

KRX's securitized products market provides means to comprehensively manage diverse assets, such as exchangetraded funds (ETFs) and securitized derivatives (ETNs, ELWs). By offering a diverse product line-up, it is keeping abreast of investors' evolving demands.



Total assets and trading value of the ETF market [Unit: KRW billion]

#### **ETF** MARKET

## Exchange-traded Funds (ETFs)

A fund, whose profitability is linked to a listed fund index or designated asset price, that is listed and traded like a stock on the

## **ETN** MARKET

#### Exchange-traded Notes (ETNs)

ETNs are structured products issued by securities companies based on the performance of their underlying indices. Similar to ETFs, ETNs are traded on the Exchange.

# **ELW** MARKET

## Equity Linked Warrants (ELWs)

A ELW is a security that represents the right to buy ("call") or sell ("put") the underlying stocks or indices at a pre-determined price

# DERIVATIVES MARKET

# SUPPORTING THE GROWTH AND **ADVANCEMENT OF THE** FINANCIAL MARKET.

The derivatives market supports the growth and advancement of the financial market by performing the functions of efficient risk management for traditional financial instruments such as stocks and bonds. price discovery, and development of new financial products.

Starting from the listing of KOSPI 200 futures in 1996, the KRX derivatives market has evolved into a global derivatives market over the past 20 years by fulfilling the diverse needs of investors for risk management, Currently, 34 derivatives products including KOSPI 200 futures and options. KOSDAO 150 futures. KTB futures, and USD futures are actively traded on the market.

AVERAGE DAILY TRADING **VOLUME (2016)** 

AVERAGE DAILY TRADING VALUE (2016)

2.82 million contracts





		TOTAL	
Comm	oditv	Stock index	Products
	Gold futures Lean hog futures	Representative indices	KOSPI 200 futures/options Mini KOSPI 200 futures/options KOSDAQ 150 futures (CME) KOSPI 200 futures
		Representative overseas indices EURO STOXX 50 futures	
		KOSPI 200 sector indices	Construction futures Business consumer goods futures Financial futures
Currency			Energy & chemicals futures
Currency futures	USD futures USD FLEX futures EUR futures JPY futures CNY futures (CME) USD futures		Information technology futures Heavy industries futures Health care futures Steels & materials futures Consumer discretionary futures Industrials futures
Currency options	USD options	Strategy- based	High Dividend 50 futures Dividend Growth 50 futures Volatility Index futures
Equity			
	Stock futures Stock options	Interes	st rate
Underlying stocks of single stock futures: 125 stocks issued by blue-chip companies including Samsung Electronics			3-year KTB futures 5-year KTB futures 10-year KTB futures

Products listed in the derivatives market

ENGLISH VERSION

