



DERIVATIVES FOR

# RISK MANAGEMENT

IN A CHANGING ENVIRONMENT



**1<sup>st</sup> CAREC Capital Market  
Regulators' Forum**

**Derivative Market Development**

**August 29-30, 2019, Islamabad**

# Our Distinguished Panel



➤ **Mr. Ejaz Ali Shah:** Managing Director, Pakistan Mercantile Exchange (PMEX)

➤ **Topic:** The PMEX Experience & Growth of commodity markets and the impact of regionalization

➤ **Mr. You Hang:** Director & China Consortium Representative on the PSX Board & Head of International Business Development at the China Financial Futures Exchange

➤ **Topic:** Exchange Traded Derivatives in China

➤ **Mr. Usman Hayat:** CEO Audit Oversight Board (AOBP)

➤ **Topic:** Efforts & challenges in developing equity derivatives at the Pakistan Stock Exchange

➤ **Mr. Amin Dawood Saleh:** Head International Bonds & Derivatives Unit, Bank Alfalah, Pakistan

➤ **Topic:** Some considerations to increase the activity and engagement from stakeholders

# What Are Derivatives?

- **Derivation from underlying asset class:** As the name implies, these are financial products that are derived from the value of an underlying asset, mainly:

FX      Fixed Income      Interest Rates  
Equities      Commodities      Credit

- **Type by Platform:** Exchange Traded or Over The Counter (OTC)
- **Type by Product:** Fundamentally four types: Forwards, Futures\*, Options\*\* & Swaps
- **Hedging:** They are most commonly used to hedge the value of the underlying liability from rising or of the underlying asset from eroding in volatile markets

- **Yield-Enhancing:** Used to create leveraged, yield-enhancing assets to optimize risk/return requirements of various classes of investors
- **Cost Reduction:** Used to reduce borrowing costs – embedded option structures
- **Wide Range:** The derivatives market has grown to encompass pretty much all asset classes in the world – we even have a vibrant Weather Derivatives Market
- **Leverage Effect:** The risk is that since derivatives are based on the value of an underlying assets, a significant downward move in asset value can cause a sharper change in the value of the related derivative
- **Competent Regulation:** Derivative markets must be competently regulated otherwise they can pose significant systemic risks

\* Only Exchange Traded

\*\*Also Exchange Traded

# The Derivatives Market

**Our Focus**

Exchange Traded Derivatives

Standard  
Contracts

Financial  
Exchanges

Minimal  
Credit Risk

Futures  
Exchanges

Securities  
Exchanges

Liquidity

Futures

Options

Shares,  
Warrants,  
Options

Over The Counter Derivatives

Tailor-made

OTC Market

Credit Risk

Commercial  
Banks

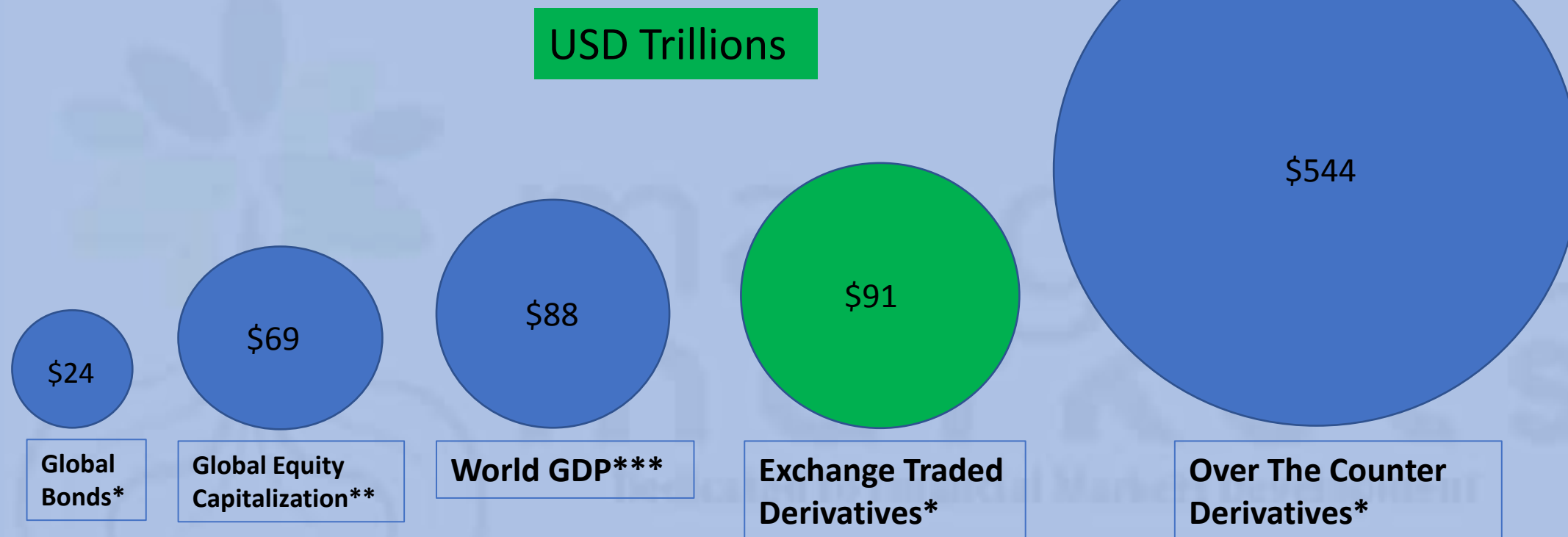
Investment  
Banks

Flexibility

FRAs, IRS, CCS, Caps, Floors, Collars, CDS, CDOs, CMO

# Global Derivatives Market

## Perspective



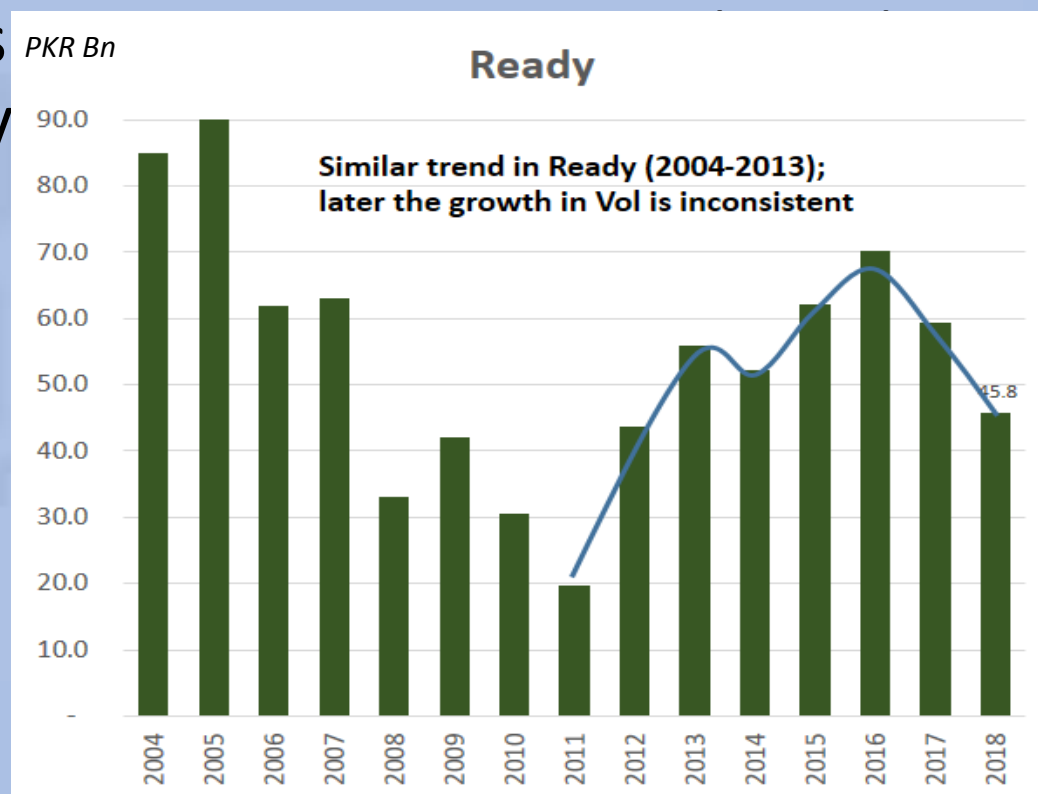
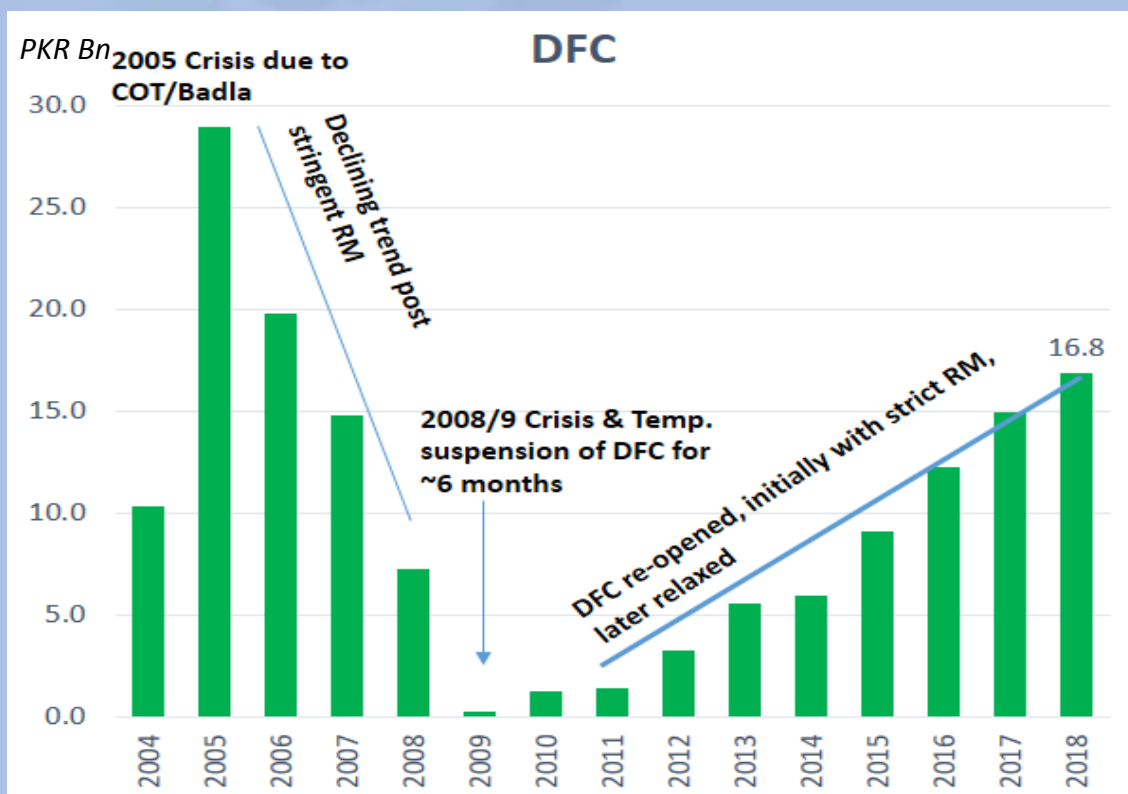
\* BIS 2018. \*\*WB Data \*\*\* World Population Review 2019 Projection

# PSX Experience in Equity Futures Contracts

- Currently three type of Futures contracts are available at PSX:
  - I. Deliverable Futures Contracts (DFC) on Single Stocks
  - II. Cash Settled Futures Contracts (CSF) on Single Stocks
  - III. Stock Index Futures Contracts (SIFC)
- DFCs were launched in 2003, CSF were launched in 2007 and SIFC were launched in 2008
- The most successful has been the DFC :
  - A 30 day contract
  - The Opening of the Contract is Monday, preceding the last Friday of the month
  - The Expiration of the DFC is the last Friday of the calendar month
- DFC contracts are traded for 56 stocks

# Historical Trading Volume in DFC vs Cash Market

- DFC volumes (Left Graph) have risen and fallen in line with the cash market (Right Graph)



# CAREC Derivative Market

		CAREC Countries										
Category	Sub-category	PRC	PAK	KAZ	GEO	TKM	KRZ	UZB	MON	AFG	AZB	TAJ
Cash Markets	FX Spot	✓	✓	✓	✓	✓	✓	x		✓	✓	
	Govt. Securities	✓	✓	✓	✓	✓	✓	✓		✓	✓	
	Corporate debt	✓	✓	✓	✓	x	x	✓		x	✓	
	Debt Repo	✓	✓	✓	✓	x	x	x		x	✓	
OTC Derivatives	FX Forwards	✓	✓	✓	✓	x	x	x		x	✓	
	Cross Country Swaps (CCS)	✓	✓	x	x	x	x	x		x	✓	
	Interest Rate Swaps (IRS)	✓	✓	x	x	x	x	x		x	✓	
	FX Option (FXO)	✓	x	x	x	x	x	x		x	✓	
	Equity Derivatives (EQD)	✓	x	✓	x	x	x	x		x	x	
Exchange Traded Derivatives (Futures)	Equity	✓	✓	✓	x	x	x	x		x	x	
	FX	✓	x	✓	x	x	x	x		x	x	
	Interest Rates	✓	x	x	x	x	x	x		x	x	
	Energy Metals	✓	✓	x	x	x	x	x		x	x	
	Agri	✓	✓	x	x	x	x	x		x	x	