Bachelor of Economics
THAMMASAT UNIVERSITY

Introduction to equity & derivatives market

By

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Biography

- **Education**
  - *Master of Financial Engineering*, Haas Business School, UC Berkeley
  - *Bachelor of Economics* (international program), TU
- **Employment experience**
  - *Quantitative strategist*, hedge fund, Phatra securities
  - *Senior analyst*, corporate strategy, SET
  - *SBL and derivatives trader*, EDM, Phatra Securities
- **Awards**
  - SET-Fulbright grantee 2010
  - Second-runner up in national environmental debate 2007
- **Extra-curricular activities**
  - *Song writer*, BE play
  - *Vice president*, Thammasat Speaker Union

Product overview

- Index
- Equities
- ETF
- Derivatives
- Derivatives warrant

Introduction to SET: Equity VS Derivatives market

Derivative warrants

Property funds/REITs

Gold futures

Single stock futures

SET50 futures/options

ThaiDR

SET50

SETHD

Oil futures

Silver futures

Warrants

mai

SET100

TSR

ETFs

Interest rate futures

Introduction to SET: Product overview >> Index

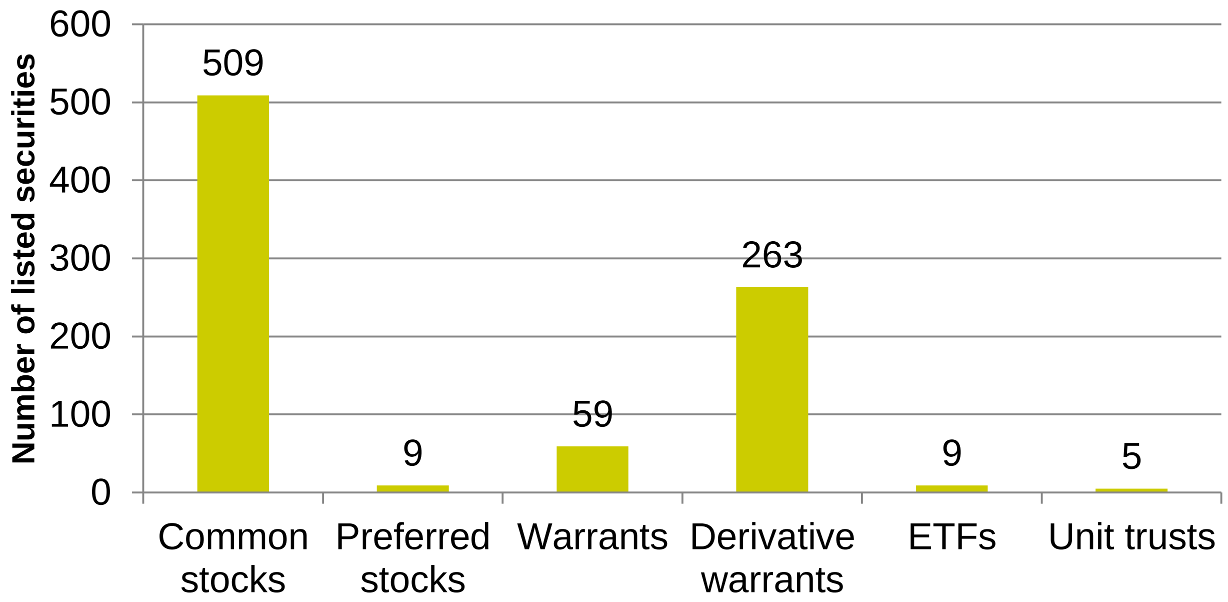
Index	Index type	Scope	Calculation methodology
SET index	Composite	All common stocks trading on SET	Market capitalization-weighted price index
SET50/ SET100 index	Composite	Top 50/100 listed companies on SET in term of large market capitalization, high liquidity, and compliance with requirements regarding the distribution of shares to minor shareholders	
SET high dividend 30 Index	Strategy	30 listed companies in term of large market capitalization, consistently traded with high liquidity, and constantly paid high dividend yields	Market capitalization and dividend yield weighted price index
mai Index	Composite	All common stocks trading on the Market for Alternative Investment (mai)	Market capitalization-weighted price index

Source: SET

Introduction to SET: Product overview >> equities

As of Apr 26, 12	ตลาดหลักทรัพย์แห่งประเทศไทย The Stock Exchange of Thailand	mai
Number of listed co’	471	70
Number of listed securities	854	92
Current market capitalization (billions of THB)	**9,950**	72.3

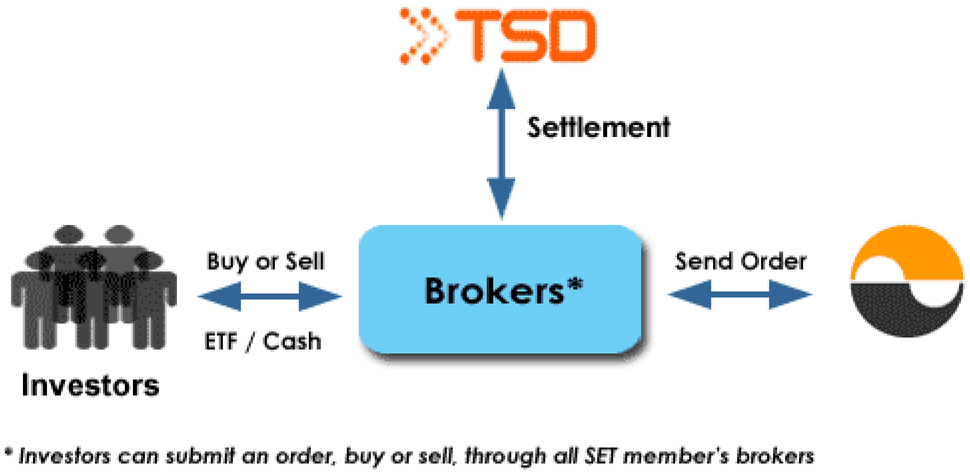
Source: SETSMART



Introduction to SET: Product overview >> ETFs (1/2)

ETF – Exchange-traded fund

- ETF is an open-ended mutual fund that is traded on a stock exchange.
- ETF enables investors to instantaneously buy or sell via a securities broker, at anytime during the trading hours at the prevailing price when the order is executed.
- Real-time NAV is provided.
- ETF has a designated market maker or a liquidity provider quoting bid and offer to ensure that investors can buy or sell ETF at the market price at anytime.



Source: SET

Introduction to SET:
Product overview >> ETFs (2/2)

Topic	ETF	Stock	Open-ended fund
An exchange traded product	✓	✓	×
Diversification	✓	×	✓
Market maker	✓	×	×
Trading channels	A securities broker		An asset management (a fund issuer)
Trading hours	During exchange trading hours		Specified by a fund issuer
Trading price	Real-time market price		End-of-day price

Source: SET

Introduction to SET: Product overview >> derivatives (1/3)

- **Derivative** is a financial instrument whose price is dependent upon or derived from one or more underlying assets. The derivative itself is merely a contract between two or more parties. Its value is fluctuations in the underlying asset.
- **Type of derivatives**
  1. **Futures** – a standardized contract between two parties to exchange a specified asset of standardized quantity and quality for a price agreed today with delivery occurring at a specified future date.
  2. **Options** – a contract between two parties for a future transaction on an asset at a reference price. The buyer of the option gains the right while the seller incurs the corresponding obligation to fulfill the transaction.
- **Advantage of future trading**
  – High leverage
  – Make profit no matter the market conditions

Source: TFEX

Introduction to SET: Product overview >> derivatives (2/3)

Type of derivatives products		Underlying asset	First trading day
SET50 INDEX FUTURES	futures	SET50 index	April 28, 2006
SET 50 Options	options	SET50 index	October 29, 2007
STOCK FUTURES	futures	Single stocks	November 24, 2008
GOLD FUTURES	futures	Gold 50 baht	February 2, 2009
		Gold 10 baht	August 2, 2010
Interest Rate FUTURES	futures	BIBOR	November 29, 2010
SILVER FUTURES	futures	Silver	June 20, 2011
OIL FUTURES	futures	Brent crude oil	October 17, 2011

- **What will come next?**
- **Which product is the most popular?**

Source: TFEX

Introduction to SET: Product overview >> derivatives (3/3)

Ticker symbol

Products	Ticker
SET50 index futures	S50
SET50 index option: call options	S50C
SET50 index option: put options	S50P
Stock futures	Stock symbol
Gold futures: 50 baht	GF
Gold futures: 10 baht	GF10
Silver futures	SV
Oil futures	BR
5Y gov bond futures	TGB5

Source: TFEX

Delivery months

F	January	N	July
G	February	Q	August
H	March	U	September
J	April	V	October
K	May	X	November
M	June	Z	December

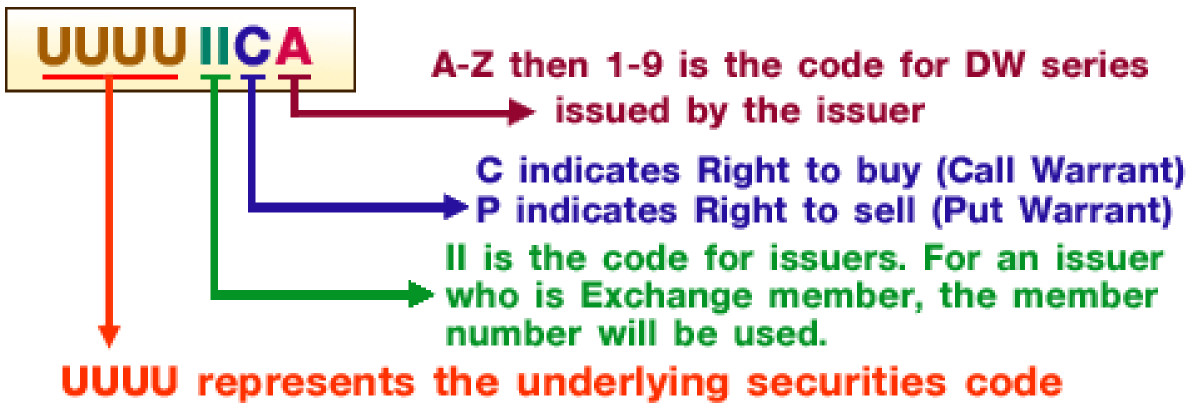
XXXYZZ

Ticker **Delivery month** **Expiry year**

Example: S50Z12
S50Z12C620
GFM12
SVV12

Introduction to SET:
Product overview >> derivative warrants (1/2)

- **Derivative warrants (DW)** are financial instruments that the issuers give rights to the buyers to buy the underlying securities in the futures at pre-determined price, quantity, and period as specified by the issuer.
- A DW issuer is a third party, which is not related to the listed company issuing the underlying securities.
- DW issuers are required by SET to have liquidity providers (market makers) to provide continuous quotes so that investors will be able to trade DW.



Source: SET

Introduction to SET: Product overview >> derivative warrants (2/2)

Items	Warrants	Derivative warrants
Issuer	The issuer of the underlying securities	Third party independent of the issuer of the underlying securities.
Issue specification	Specified by the listed company	Specified by the issuer
Expiration date		
Type of rights	Right to buy new shares issued by listed company	Right to buy (call warrant) or sell (put warrant) the underlying securities as specified in DW
Exercise of rights	Total number of outstanding shares of the underlying securities increases because the listed company issues new shares corresponding to the right exercised	No effect to the number of outstanding shares of the underlying securities

Source: SET

Introduction to SET: Product overview >> recap

BBL

BBL-W1

BBLZ11C120

BBLZ11

BBL13CA

BBL01PA

- **Given that we have 5 products which share the same underlying asset, BBL. What's difference?**
    - Type of products
    - Type of markets
    - Type of exposure
    - Degree of leverage
- **Why do we need a variety of products which based on the same underlying asset?**

SET index return is higher than deposit rate and bond yield during a past couple years.

Returns across several asset classes as of September 30, 2011

Returns (%)	Past 1 year	Past 2 Years	Past 3 years
1. Equity			
SET index	-6.06	27.77	53.59
SET50 index	-5.65	24.32	52.51
mai index	-1.67	22.60	13.61
2. Bank deposit*			
Saving deposit	0.88	1.61	3.26
Time deposit			
6 months	2.10	3.17	6.14
12 months	2.43	3.58	6.63
24 months	2.73	4.91	8.19
3. Bond			
Short-term government bond	2.24	3.59	6.00
Composite bond index	-0.05	8.57	16.11
4. Commodities			
Gold	24.12	76.68	77.12
Oil	-0.96	12.17	-21.30

Remark: **The bank deposit is an average rate of all commercial banks*