

Exchange-Traded FX Contracts

- **FX contracts which are issued and traded on regulated public exchanges**

- **Two types of exchange-traded contracts**
 - *FX futures*

 - *FX options*

korth

1

Exchange-Traded FX Contracts

- **There are no exchange-traded:**
 - Spot-market contractsor
 - Forward-market contracts.

korth

2

Exchange-Traded FX Contracts

- ***Negotiable***
 - *Secondary market*

- ***Standardized***
 - Amount (i.e., size)

 - Settlement dates

korth

3

**Exchange-Traded FX Markets:
*Participants***

- **FX brokers**—bringing buyers & sellers together
 - **Commissions**—paid by both buyer & seller

korth

4

**Exchange-Traded FX Markets:
Participants**

- **Customers are similar to those in the OTC market, except:**
 - There is *no government intervention*.
 - **Small companies & individual speculators can trade.**

korth

5

**Exchange-Traded FX Markets:
Participants**

- **The actual counterparty to all exchange-traded FX contracts is the FX-exchange *clearinghouse*.**
 - The clearinghouse is the *guarantor* of the transaction.
- **The buyer and seller do *not* know each other.**

korth

6

Exchange-Traded FX *Futures*

- **Standardized FX contracts for future delivery which sell on public exchanges**
- **Serve same purposes as FX forward markets**

korth

7

Exchange-Traded FX *Futures*

- **Movements in the futures market mirror those in the FX forward market.**
- **There is *no* exchange-traded *spot* market.**

korth

8

Exchange-Traded FX *Futures*

- **Forwards are derivatives of the spot market.**
- **Futures are derivatives of the forward market.**

korth

9

Exchange-Traded FX Futures

- **Margin accounts** are required to provide security.
 - *Initial margin*
 - *Maintenance margin*
 - *"Mark to market"*

korth

10

Exchange-Traded FX Futures

- **Quotations of exchange-traded futures**
 - *American terms*
 - Single price: buy price = sell price
- **FX futures exist in only a few currencies:** €, £, ¥, C\$, SF, A\$ & M\$

korth

11

FX Futures: Contract Sizes

- **Sizes are fixed and much smaller than in the OTC market.**
 - £ 62,500
 - CAD 100,000 [Canadian \$]
 - AUD 100,000 [Australian \$]
 - CHF 125,000 [Swiss franc]
 - € 125,000
 - MXN 500,000 [Mexican peso]
 - ¥ 12,500,000

korth

12

FX Forwards vs. Futures

	<u>FX Forwards</u>	<u>FX Futures</u>
Trading site	Bank	Exchange
Customer	Wholesale	Wholesale; retail
Currencies	15 – 20	5 - 8

korth 13

FX Forwards vs. Futures

	<u>FX Forwards</u>	<u>FX Futures</u>
Customer deals w/	FX trader (for bank)	Broker
Counterparty	Bank	Clearinghouse

■ korth 14

FX Forwards vs. Futures

	<u>FX Forwards</u>	<u>FX Futures</u>
Trading day	24-hours	Normal Hours of exchange
Customer's cost	Spread	Commission (to broker)

korth 15

FX Forwards vs. Futures

	<u>FX Forwards</u>	<u>FX Futures</u>
Contract size	Customized	Fixed
Maturity	Customized	8 / year
Pricing	Bid & offer	Auction (1 price)

korth 16

FX Forwards vs. Futures

	<u>FX Forwards</u>	<u>FX Futures</u>
Collateral	Usually none	Margin requirements
Marketable	No	Yes
Delivery	Usually	Seldom

korth 17

- Exchange-Traded FX Options**
- **Contracts that give the *buyer* the right (i.e., the option), not the obligation, to buy or to sell the currency**
 - **But the *writer* of the option has no option!**
- korth 18

Exchange-Traded FX Options

- More than 90% of options are never *exercised* (i.e., they die).
- Options only exist for a few currencies—even fewer than with futures.

korth

19

FX Options: *Purpose*

- Options are first differentiated according to their *purpose*:
 - *Call option*: Option to buy
 - *Put option*: Option to sell

korth

20

FX Options: *Exercising*

- Options are also differentiated according to *when* the option can be *exercised*:
 - *European option*: can be exercised only on its *expiration date*
 - *American option*: can be exercised on any date while the contract is valid

korth

21

Exchange-Traded FX Options

- The cost of the option, the *premium*, varies according to:
 - Type of option (e.g., *American call*)
 - The *strike price*
 - The *expiration date*, and
 - Market conditions

22

Exchange-Traded FX Options

- Purchaser of an option gains:
 - Flexibility
 - *To exercise* the option
 - (Or) let it *expire*
 - Insurance
 - Speculation

korth

23

Exchange-Traded FX Options

- Maximum loss of the *purchaser* equals the transaction costs
 - Premium: paid to *writer*
 - +
 - Broker's commission
 - +
 - Exercise price of the call option—
but only if buyer opts to exercise

korth

24

Writer of the Option

- Has *no* option
 - Has an *obligation* to the buyer, who has complete control
 - Receives the premium for the risk
 - *Most options are never exercised!*

korth 25

Writer of the Option: *Risk*

- *Covered options*
- *Naked options*

korth 26

OTC vs. Exchange-Traded Contracts

	<u>OTC (i.e., Bank)</u>	<u>Exchange</u>
Spot	Yes	No
Forward	Yes	No
Future	[Yes]	Yes
Option	Yes _{korth}	Yes

OTC vs. Exchange-Traded Contracts

OTC (i.e., Bank) Exchange

Secondary
market

No

Yes

Counterparty

Bank

Clearinghouse

korth

28
