

The Eurodollar - From Galen Burghardt's book,
The Eurodollar Futures and Options Handbook.

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Ch 3

The Eurodollar Futures Contract

CME Eurodollar Futures

Trade Unit	Eurodollar Time Deposit having a principal value of \$1,000,000 with a three-month maturity. 1 point = .01 = \$25.00
Point Descriptions	Mar, Jun, Sep, Dec, Forty months in the March quarterly cycle, and the four nearest serial contract months.
Contract Listing	N/A
Strike Price Interval	Clearing=ED Ticker=ED GLOBEX=GE

Trading Venue: CME® Globex®

Hours	Mon/Thurs 5:00 p.m.-4:00 p.m. & 2:00 p.m.-4:00 p.m.; Shutdown period from 4:00 p.m. to 5:00 p.m. nightly; Sun & Hol 5:00 p.m.-4:00 p.m. LTD-5:00 a.m.
Listed	2.00 IMM index points above or below the reference RTH price
Strike	N/A
Limits	200 points
Minimum Fluctuation	Regular 0.01=\$25.00 Half Tick 0.005=\$12.50 Quarter 0.0025=\$6.25 for nearest expiring month.

When is the last trading day for Eurodollar?

Eurodollar futures cease trading at 5:00 a.m. Chicago Time (11:00 a.m. London Time) on the second London bank business day immediately preceding the third Wednesday of the contract month; final settlement price is based on the British Bankers' Association Interest Settlement Rate.

How is the implied forward rate calculated?

Eurodollar futures reflect market expectations of forward 3-month rates.

An implied forward rate indicates approximately

where short-term rates may be expected to be sometime in the future.

The following formula provides a guideline for calculating a 3-month rate, three months forward:

$$1 + 6\text{mth spot rate} \times 182/360 = (1 + 3\text{mth spot rate} \times 91/360) (1 + 3\text{mth fwd rate} \times 91/360)$$

For example: 3-month LIBOR spot rate = 5.4400%

6-month LIBOR spot rate = 5.8763%

3-month forward rate = R

$$1 + .058763 \times 182/360 = (1 + .0544 \times 91/360)(1 + R \times 91/360)$$

$$1.029708 = (1.013751)(1 + R \times 91/360)$$

$$1.015740 = (1 + R \times 91/360)$$

$$0.062270 \text{ or } 6.227\% = R = \text{the implied forward rate}$$

What is the minimum price fluctuation (tick)?

Trading can occur in .0025 increments (\$6.25/contract) or "1/4 tick"

in the expiring front-month contract;

in .005 increments (\$12.50/contract) or "1/2 tick" in the four serial, and

all forty quarterly expirations.

Trading can occur in .0025 increments (\$6.25/contract) or "1/4 tick"

in the expiring front-month contract; in .005 increments (\$12.50/contract)

or "1/2 tick" in the four serial, and all forty quarterly expirations.

Quarterly and Serial Contracts

33 If you were to go to the page in this workbook "Eurodollars in the Market" you'll see almost all the Eurodollar contracts listed. Almost, because I didn't list the serial contracts. Let me explain:

Serial ED Contracts

If I had listed the serial contracts, in that list of ED contracts I'd have inserted the following months:
May 06, July 06, Aug 06, Oct, 06
So the list would look like this:

	Is
@GE06K	
@GE06M	94.765
@GE06N	
@GE06Q	
@GE06U	94.685
@GE06V	
@GE06Z	94.655

Note that I didn't enter the prices of the SERIAL contracts. That's because I don't know where they were trading at the time. I don't track the Serial contracts. But, that doesn't mean you shouldn't or that you couldn't trade them.

There's certainly some volume in at least 2 of these contracts.

Volume at Close Open Interest

	May	June	July	August	September	October	December
@GE06K	3679	25,722					
@GE06M	245,000	302,084					
@GE06N	540	2,962					
@GE06Q	41	1,368					
@GE06U	313,000	473,082					
@GE06V	1,200	1,167					
@GE06Z	294,000	458,407					

As you can see, the interest is in the front serial contract. Open interest is in the front serial contract also (May 06). When May expires, the front month serial contract will be July06. Then, the CME will add Nov06 as the last serial contract.

35 Last Trading Day

Contracts expire at 11am LONDON time, 5am Chicago time.

The actual day in the month is 'the 2nd London BANK business day immediately preceding the 3rd Wednesday of the contract month.'

36 **Value Date**

Value Date = 2 London business days after expiration

Electronic Liquidity for Single Contracts

0-3 yrs Best

4-5 yrs Ok

6-10 yrs None

See Eurodollar page. There's a column there for volume by contract.

36 **Underlying the Eurodollar Futures are:**

- CDs issued by a bank that's not insured by the US Gov.
- They can be considered a credit risk since they're not backed by the Gov.
- The credit grade would be considered High. Or excellent, as in AAA. Just not as solid as the US Gov.
- This is why they usually trade with a 'Term Premium'.
- Meaning, their yields are higher than a similar length instrument backed by the US Gov.

Eurodollars settle to the LIBOR rate (London InterBank Offer Rate)

Here's a list of the symbols for different maturities of the LIBOR

Symbol	Name
us@?GLUS10M	10 month
us@?GLUS11M	11 month
us@?GLUS1M	1 month
us@?GLUS1Y	1 year
us@?GLUS2M	2 month
us@?GLUS3M	3 month
us@?GLUS4M	4 month
us@?GLUS5M	5 month
us@?GLUS6M	6 month
us@?GLUS7M	7 month
us@?GLUS8M	8 month
us@?GLUS9M	9 month

CME Seminar

CME Seminar Stats

CME fills Euros in 40 milliseconds on Globex

Outright Single Contracts

- Pro Rata Algorithm
- Market Maker in outrights of market turner.
- Once market trades away from price by a tic, system returns to Pro Rata

Packs and Bundles

- FIFO

36 This page has basics on Packs and Bundles.
I've created a sheet within this workbook for Packs and Bundles.

38 Volume and Open Interest
Eurodollar futures are a hedging contract as opposed to the CBOT notes and bond futures.
If you were to take the open interest in the ED s and divide it by the average daily volume the answer would be a 'turnover ratio'.
The ED s turn over about once a week while the 10 year note futures turn over almost once a day. This is how you can tell that the ED s are a hedging contract and the notes are a traders contract.

End Chapter 3
