Introduction to Foreign Exchange

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Risk Disclosure

- Options and Futures are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading options read the “Characteristics and Risks of Standardized Options”. Before trading futures, please read the CFTC Risk Disclosure. For a copy of either disclosure, 203 618-5800.
- In order to simplify the computations, commissions, fees, margin interest and taxes have not been included in the examples used in these materials. These costs will impact the outcome of all transactions and must be considered prior to entering into any transactions. Investors should consult their tax advisor about any potential tax consequences.
- Any strategies discussed, including examples using actual investments and prices, are strictly for illustrative and educational purposes only and are not endorsements, recommendations or solicitations to buy or sell any security or other investment. Past performance is not a guarantee of future results.
- There is a substantial risk of loss in foreign exchange trading. The settlement date of foreign exchange trades can vary due to time zone differences and bank holidays. When trading across foreign exchange markets, this may necessitate borrowing funds to settle foreign exchange trades. The interest rate on borrowed funds must be considered when computing the cost of trades across multiple markets.

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Currency Trading – Some Facts

- Daily average volumes
  - Equities $46 billion
  - Bonds $300 billion
  - Currencies - $3.4 trillion
- Currency trading has become a vogue investment vehicle
  - Volatile
  - Allows for view formation
  - Global theme rather than corporate bias

Majors and Minors

- The major global trading unit is the American dollar
- Most trading is inter bank for two-day settlement
- Most actively traded against:
  - The single European currency – the euro €1 = $1.3964
  - The Japanese yen $1 = ¥95.12
  - The British pound – sterling £1 = $1.6156

Note the convention here

Product Offerings – Cash FX

- By far the most popular method of trading
- By far the most liquid – 24 hour marketplace
- Characterized by lack of central market place
- Most competitive
- Trade occurs on electronic commerce networks
- Collaboration of quote vendors
- Two models:
  - Artificial bid/ask spread
  - Contributing montage of vendors – fixed rate commission

Product Offerings – Futures

- Increasingly popular ON-exchange for future delivery
- Standardized product offering
- Margin product and so requires no daily interest burden
- Cost of carry embedded in futures prices
- CME and GLOBEX ensure virtual 24-hour coverage
- Physical delivery

Product Offerings – Options

- Offer risk management and leverage on FX positions
- Currency options traded on exchange in two types:
  - Cash settled options (PHLX and ISE)
  - Futures based options (CME)
- Investor preference for trading through expiration
- PHLX and ISE are cleaner for retail traders looking for cash settlement in U.S. $ currency
- CME options are best if you want to take delivery of futures contracts

Chicago Mercantile Exchange

- Latest data for June 2009 showed average daily volume of 683,906 currency contracts
  - June 2008 ADV = 741,224

Chicago Mercantile Exchange - Products

- Australian dollar
- Brazilian real
- British pound
- Canadian dollar
- Chinese remninbi
- Czech koruna
- Euro currency (also mini)
- Hungarian forint
- Israeli shekel
- Japanese yen (also mini)
- South Korean won
- Mexican peso
- New Zealand dollar
- Norwegian krona
- Polish zloty
- Russian ruble
- Euro/ yen
- Euro/ Swiss
- Euro/ British pound

Chicago Mercantile Exchange Volumes

Against the U.S. Dollar

- Euro
- Yen
- British pound
- Swiss Franc
- Canadian dollar
- Australian dollar
- Mexican peso

Avg. Daily contract volume June '09 (June '08) lots per day

- 239,135 (252,952)
- 87,847 (152,089)
- 118,593(98,037)
- 49,731 (85,195)
- 76,895 (54,852)
- 76,963 (50,933)
- 15,362 (34,029)

Chicago Mercantile Exchange Volumes

Cross rates

- Euro/ Japanese yen
- Euro/ Swiss franc
- Euro/ British pound

Avg Daily contract volume June ’09 (June ’08)

- 134 (740 lots per day)
- 140 (108 lots per day)
- 366 (294 lots per day)

Cash or Future? Your Choice

- IB offers FX Trader and futures trading
- It is more risky to trade futures with less liquidity.
- Cash traders have the advantage of leverage and potentially narrower spreads
- End up with similar product
- For majors IB offers leverage rate of 40:1 or 2.5% margin
- Let's compare a euro futures contract to cash

Cash or Future? Your Choice

Euro future

- Contract size is €125,000
- (~ $170,000 when €1 = $1.35)
- Initial margin = $ 4,725

Euro cash transaction

- Using 40:1 leverage
- Buying $170,000 of euros would require $4,250 margin
- Plus/minus any financing costs
- Cash is more expensive margin-wise
- Future doesn't provide benefit of carry trade
- Narrower spreads in both major and minor quotes

What Drives Currencies?

- ❑ Interest rates
- ❑ Growth
- ❑ Inflation
- ❑ Employment
- ❑ Trade deficit
- ❑ Perceived central bank bias
- ❑ Not an exact science…

Interest Rates

- Monetary policy is set by:
  - Central Bank
  - Government
  - Most nations realize that manipulating currencies doesn't work
- A benchmark interest rate is set via market operations
- The difference between yields paid across currencies in part govern the appeal of each

Growth

- Gross domestic product measures a country’s output
- Investors like fast growth
- Keeps currency buoyant
- Countries that grow strongest tend to have a firmer currency
- It says a lot about export and import demand

Inflation

- Rising prices erode growth – create an illusion of faster growth
- Falling prices not good for an economy – difficult to stem loss of confidence
- Not too hot, not too cold
- Concept of real interest rates
    - Nominal interest rate minus rate of inflation

Employment

- Rising employment is a sign of economic health
- Consumption accounts for 70% of U.S. economy
- Not too fast – not too slow
- Wages are a key sign of growth trend

Trade Deficit

- Goods in - goods out creates a trade balance
- Too high imports creates an exodus of capital – bad for a currency
- Too high exports can create domestic demand constraints and stoke inflation
- Investors punish nations with too high a deficit since that currency needs to become less attractive to allow exports to compete
- Deficits generally don't last forever

Central Bank Bias

- Visit central bank homepages and read the minutes of recent meetings
- These policy meetings directly address these issues and give a (lagged) sense of key metrics and hints as to what the next move might be
- You’ll hear amplifications of these views as individual bank members deliver speeches
- Currency markets tend to trade several moves ahead and reward currencies supported by rising rates

Fundamental Summary

- Interest rates – depends on outright level plus next move
- Growth – relative and type of growth
- Inflation – real rate of interest is key
- Trade – a sense of balance must prevail to avoid fears of tipping into "unsustainable deficit" or "domestic explosion" fear
- Central bank – needs to be seen to be in control and currency demand will tend to trade expectations

Open Interest

- Valuable source of futures information
- Gives long, short and net currency futures positions
- Gives net changes in open interest
- Published each Friday at www.cftc.gov
- Treat the data as a guide to market sentiment rather than a bible of what's about to happen

Recap

- The demand and price of currency is determined by a variety of factors
- Each factor can rise or fall in importance over time
- Currencies tend to be rewarded when central banks are proven right over time – strong media bias here
- But most importantly, traders play psychological games with expectations
- They will sell a currency on an identical report three months after having bought on the same outcome
- Traders perceptions can be wrong

Trading

- Now you're up to speed with fundamental analysis
- Decision now is as a dollar bull or dollar bear
- Or you could look at currency crosses…
- Or you could target the commodity dollars... (Australia, Canada and NZ$)
- Let's look at an example in regard to positioning
- Show entry and trade management
- Start with British pound

British Pound Future (CME & Globex)

- Finding what you want on IB website – remember future versus forex
- Find Trading, Product Listing, Futures and then CME
- Pound given as:
  - Multiplier of 62,500 (this is a nominal pound sterling value)
  - Increment of 0.0001
  - Multiply the two to give tick value of $6.25
  - Trading hours –
    - CME 07:20-14:00
    - Globex 17:00-16:00

British Pound

- One currency future has a nominal face value of £62,500 or in dollar terms $100,975.00 (when £1 = $1.6156)
- Quote is £1.00 = $1.6156 dollars
- So intuitively, a rising number equates to strength for £
- Minimum tick movement of 0.0001 (1 basis point)
  - From $1.6156 to $1.6157
- That movement is 62,500*0.0001=$6.25
- Since there are 100 basis points to a cent, a movement of a full cent is 100*$6.25= $625

British Pound

- Our trader decides to go long the pound with the view that it might decline in value against the dollar
- Sells 3 lots June '07 British pound futures @ $1.9850 (5/15/07)
- By 5/18/07 the pound has indeed weakened to $1.9660
- Trader buys back 2 lots
  - 1.9850 – 1.9660 = 0.0190 /0.0001*6.25 = $1,188 * 2 contracts = $2,375
- Pound falls to $1.9530 where third lot is covered
  - 1.9850-1.9530 = 0.032/0.0001*6.25 = $2,000
  - Total gain is $2,375 + $2,000 = $4,375

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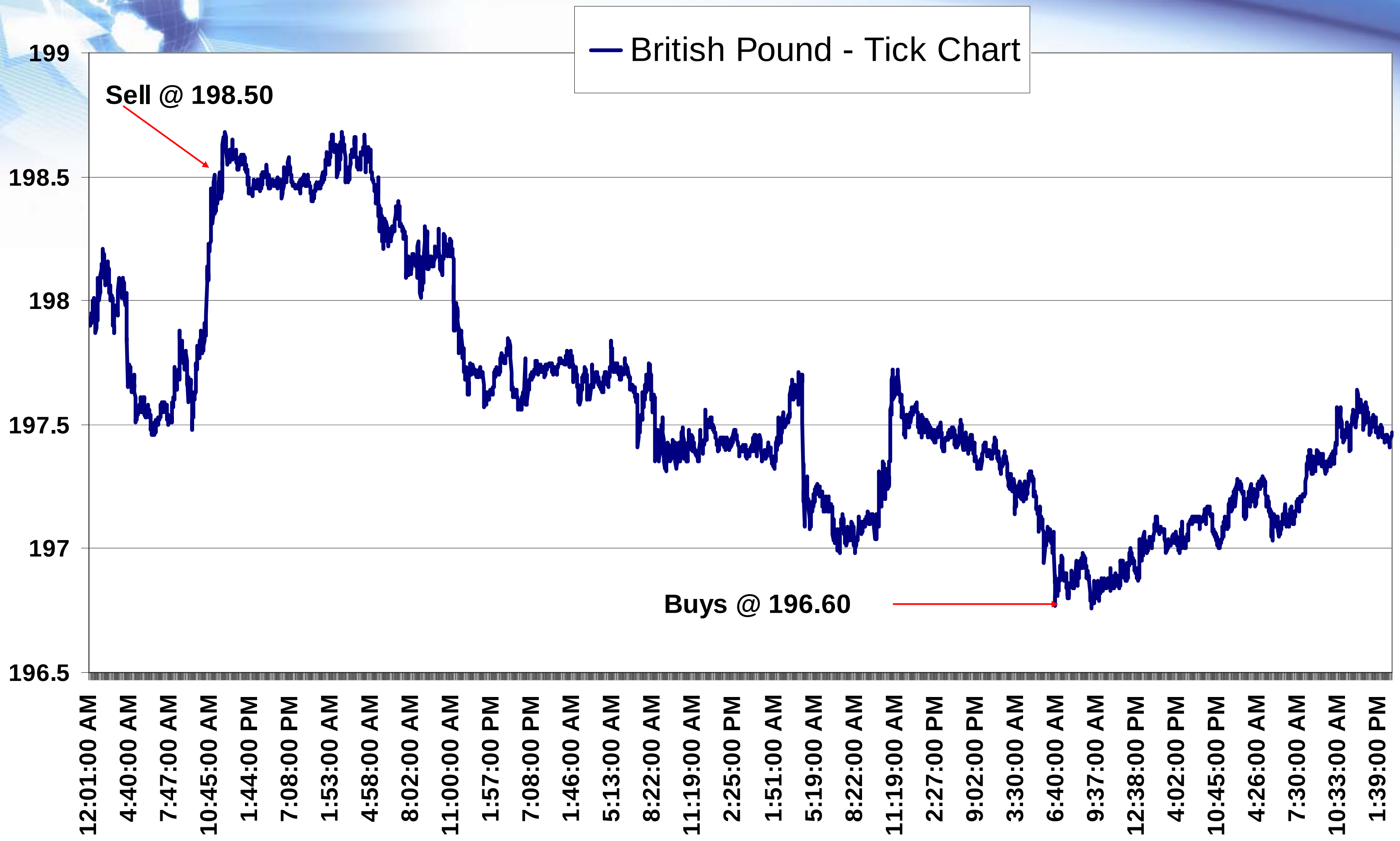

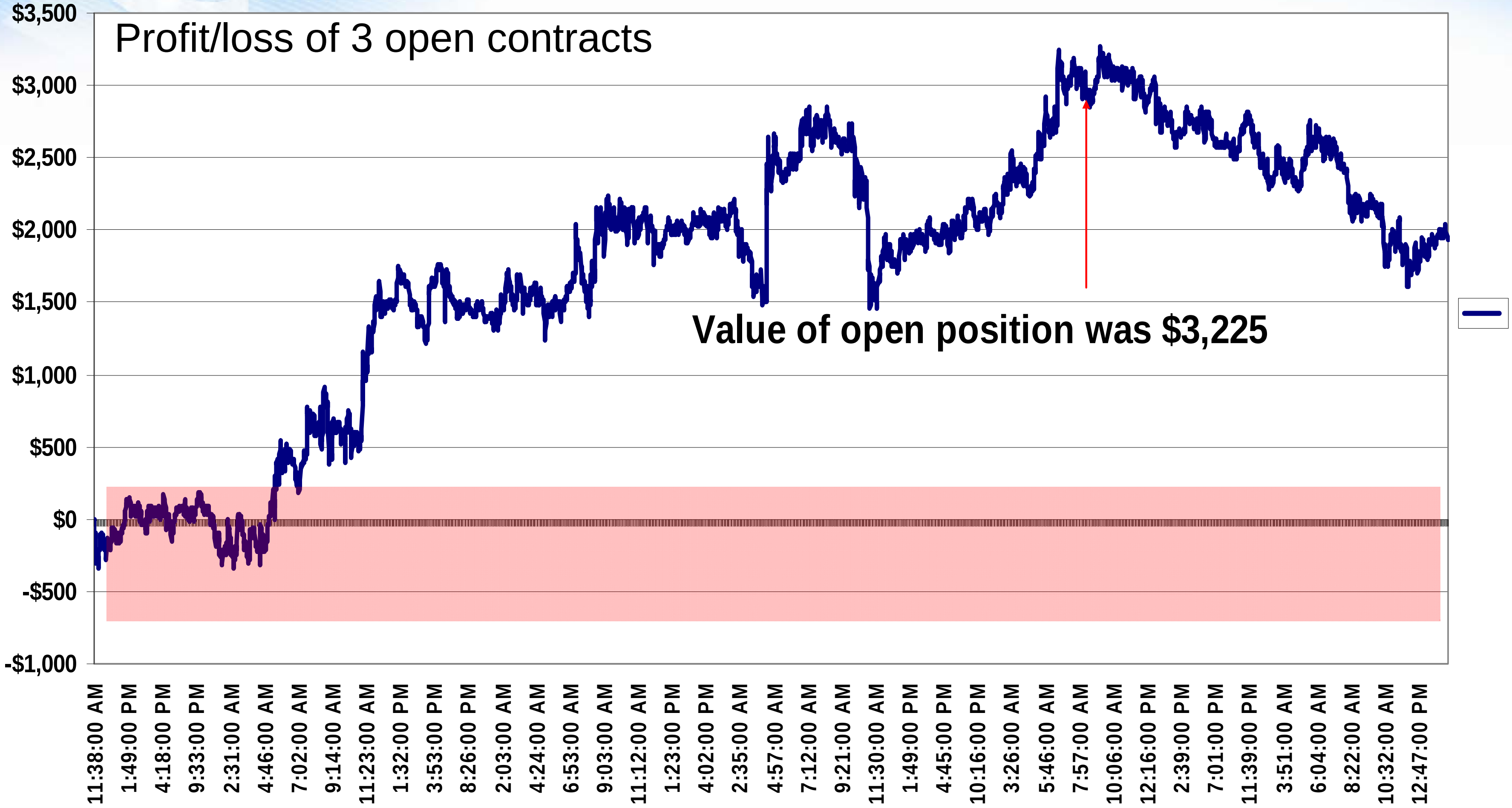
Profit/loss of 3 open contracts
Value of open position was $3,225
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
-$500
-$1,000
11:38:00 AM
1:49:00 PM
4:18:00 PM
9:33:00 PM
2:31:00 AM
4:46:00 AM
7:02:00 AM
9:14:00 AM
11:23:00 AM
1:32:00 PM
3:53:00 PM
8:26:00 PM
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4:45:00 PM
10:16:00 PM
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5:46:00 AM
7:57:00 AM
10:06:00 AM
12:16:00 PM
2:39:00 PM
7:01:00 PM
11:39:00 PM
3:51:00 AM
6:04:00 AM
8:22:00 AM
10:32:00 AM
12:47:00 PM

Leverage

- Notice that at the moment when that British pound position was doing best, leverage offered paper profits of 60+%
- Don't get carried away
- Consider your trade parameters ahead of time
- Ensure that you tailor your position to your time frame
- If you predict a major decline in the value of the dollar versus the euro, make sure you run a small enough position to ensure you don't get thrown off the train

Dollar Index

- Another way of playing the dollar is by use of its index
- Available electronically on NYBOT/ICE
- Weighted basket of 6 currencies traded against the dollar

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Currency Options

- Given the intraday volatility of currency movements, some investors may prefer options available on most currencies
- Spreads can be wide
- But still can afford investors with a fixed cost way of playing the currency markets
- Should consider implied volatility of currencies and how to apply it to trading
- Also consider "risk reversal" quotes

Options on Currency Futures – Calls

- Let's move to currency futures
- How does one capture the potential unwinding of the "carry-trade?"
- Let's look at how call options were priced before the recent surge in the yen
- Feb 14, 2008 June yen futures trading at 84.16

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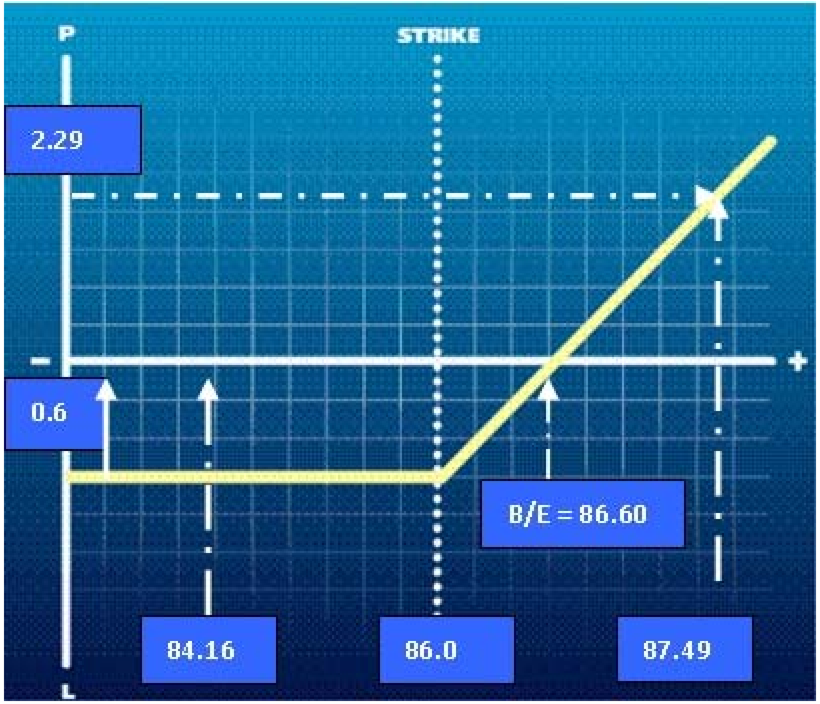
June Japanese Yen Future

Long Call - Example

- Action: Feb 14. June future closed @ 84.16
- Buy 1 June 86.0 call @ 0.60 points
- Result: March 5. June future closed @ 87.49
- Sell 1 June 86.0 call @ 2.29 points
- Profit is 2.29-0.60 = 1.69 ÷ .01 * $12.50 = $2,112.50



Questions