Oil Trading

Simon Basey / November 28, 2013

What does IST do?

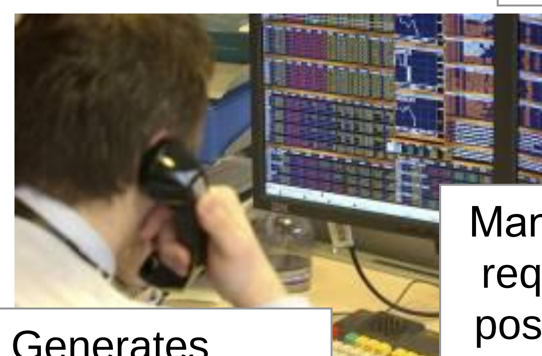
Markets BP's equity crude oil, NGLs and natural gas

Offers risk management products to third parties

Works with each business segment to enhance value

Imports crude oil and other feedstocks for the refinery system

Imports products to meet marketing demand



Exports finished products and components to maximise refinery margins

Generates entrepreneurial trading income

Manages BP's forex requirements, debt positions and share buybacks

What is trading?

In the past deals had to be concluded face-to-face or on open outcry floors. Trading was centralised and participants had to be physically present or executing through nominees to be in the market.

PHOTO: JOHN R. COUGHLIN/CNNMONEY

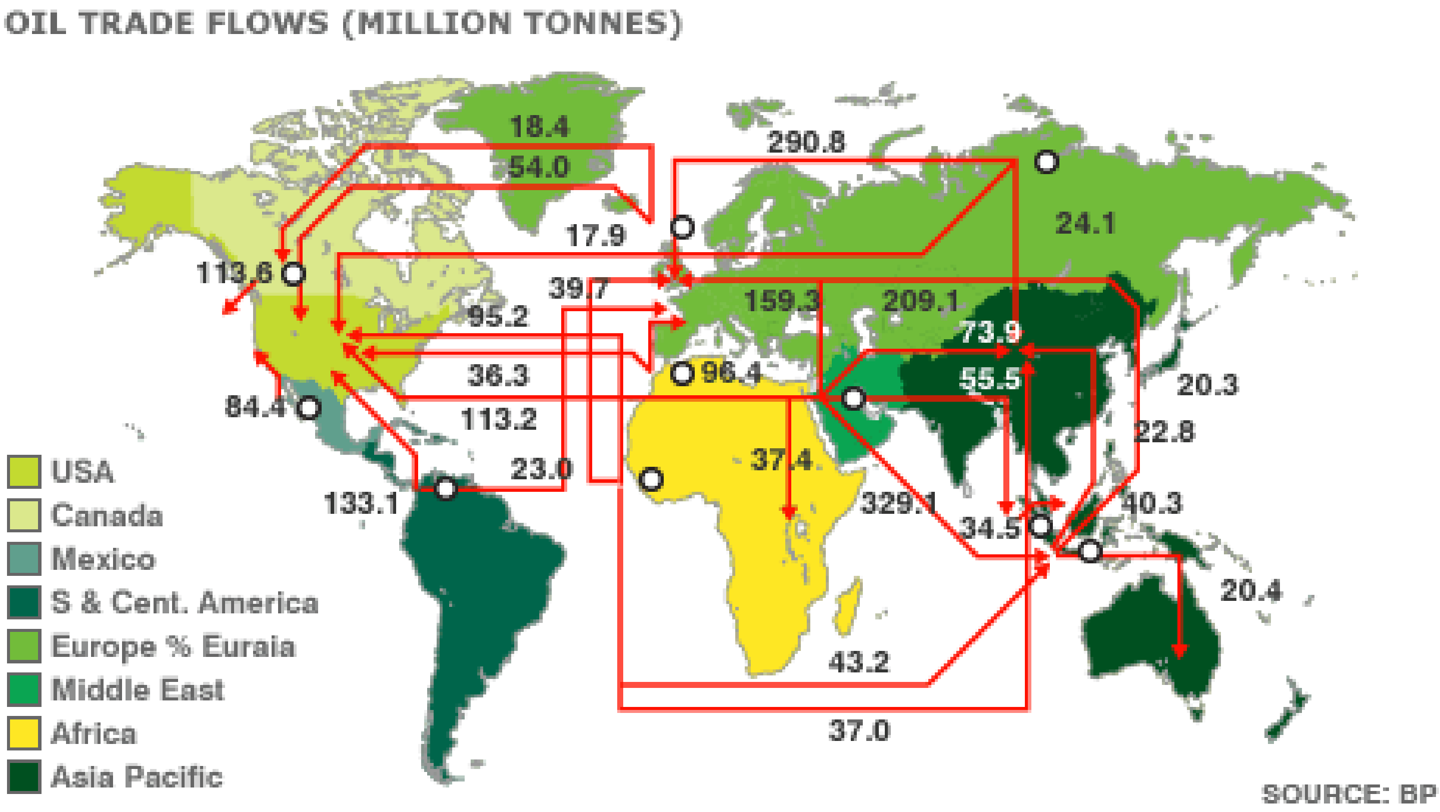
Technological advances have made trading now more screen focussed, with less personal interaction, but physical trading still offers great opportunities for relationship-based business.

Physical or Paper?

Prices - 02/03/11

Delivery	Time (CET)	Last	Vol	Day Vol	Bid Size	Bid	Ask	Ask Size	+/-	Open	High	Low	Settl.	O.I.
MAR 11	10:30	199.10	1	1	5	197.00	202.40	10	-0.75	199.10	199.10	199.10	199.85	4
MAY 11	15:26	200.40	5	97	5	200.00	200.40	21	-2.1	201.10	202.50	200.00	202.50	4,568
JUL 11	-	-	-	-	5	201.00	203.40	21	-	-	-	-	204.50	299
NOV 11	13:50	160.35	4	27	5	160.50	161.90	8	-2.65	162.50	162.50	160.35	163.00	9,394
JAN 12	-	-	-	-	7	161.00	165.90	8	-	-	-	-	164.50	25
MAR 12	-	-	-	-	5	162.50	167.90	5	-	-	-	-	166.35	158
MAY 12	-	-	-	-	12	166.00	169.90	8	-	-	-	-	170.35	406
JUL 12	-	-	-	-	12	166.00	-	-	-	-	-	-	173.00	3
NOV 12	13:55	146.00	8	117	8	145.00	150.00	3	-1	146.00	146.00	146.00	147.00	673
MAY 13	-	-	-	-	8	149.50	160.00	3	-	-	-	-	151.50	1

Global business opportunities



Functional expertise is core to IST's success

7 specialist functions

Ethics & Compliance	Commercial Development
Finance	Risk
IT&S	Legal
HR	

Logistics, planning, transportation

Refineries
BP Castellon

Ships
LR1 – Stena Poseidon

Tank farm
Linden, NJ

The importance of assets

Myth

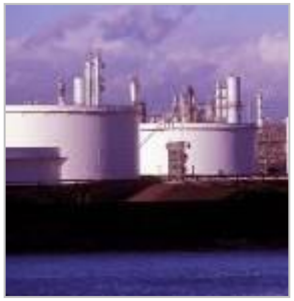
We only speculate on the price of oil and gas.

Reality

We don't speculate on price.

Assets form the basis of trading within BP.

We do speculate on quality differentials, regional differentials and time differentials.



Trading tactics

- **ARBITRAGE:** trade the dislocation of prices between geographical areas or time periods
- **FLAT PRICE TRADING:** trade the outright position and movement in one commodity
- **HEDGING:** mitigate risk, for example using offsetting futures contracts
- **SPREADS TRADING:** trade the movement in difference between two products or over time
  - **CRACKS/SPARKS:** trade the movement in difference between crude and refined product (crack spread) and gas and electricity (spark spread)

Tools of the trade

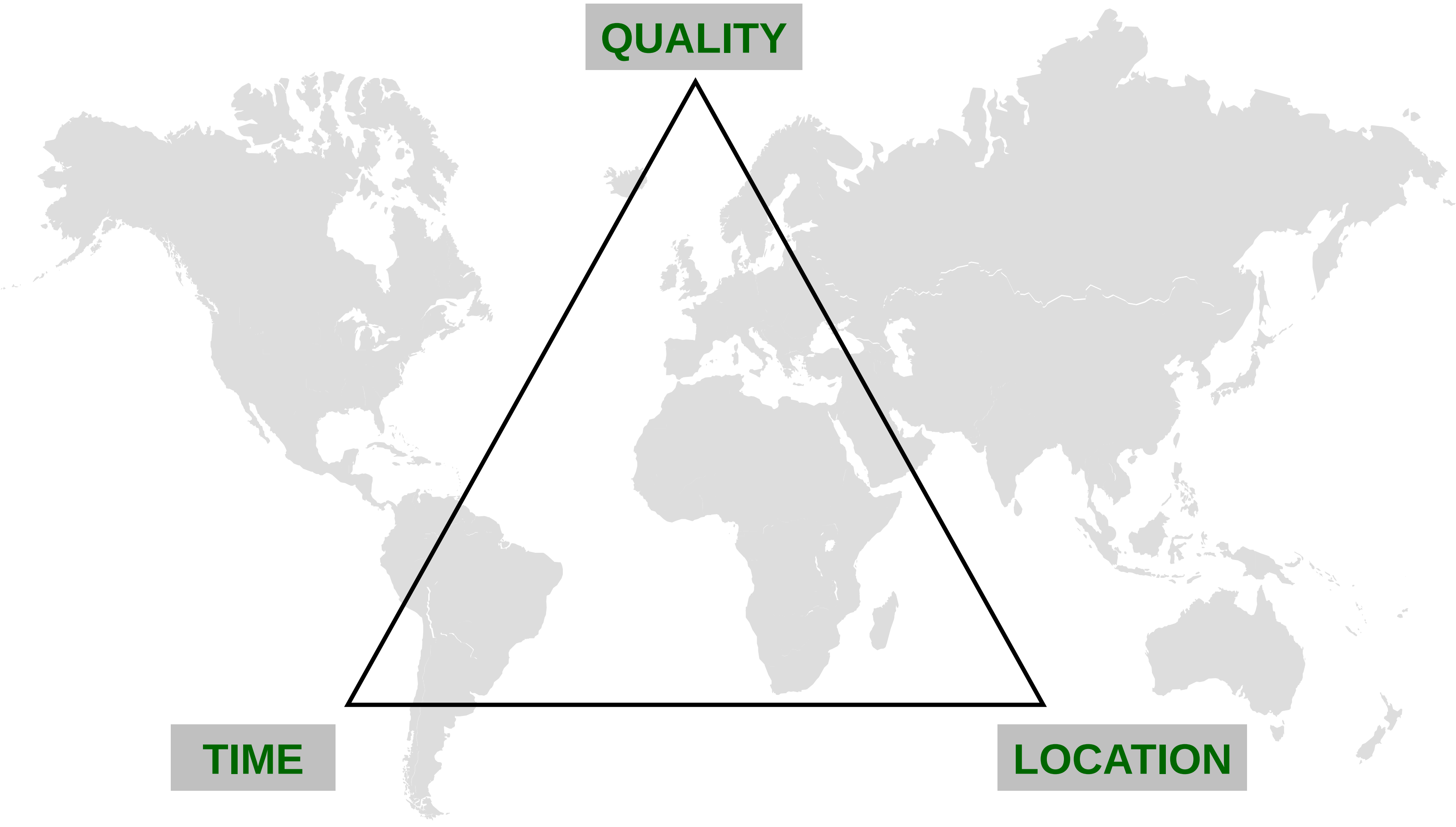
- Fundamentals
  - News, price feeds, stock reports, OPEC production
- Technical market analysis
- Sentiment
- Analysts
  - Quantitative
  - Risk
  - Credit

Trading Positions

You are a crude all trader, focussing on US crude oil futures. How would you trade the following timeline of events:

a. Escalating violence in Saudi Arabia as a group of armed insurgents attack oil pipelines near Rabigh. Impact unclear.
b. A peace deal is agreed with the insurgents and attacks cease for the time being.
c. A hurricane develops in the Gulf of Mexico and threatens to shut in crude production.
d. New data indicates improving world economic conditions.
e. Shift in the course of the hurricane means that crude production is not impacted but refineries in the Houston area prepare to evacuate.
f. OPEC agree to increase headline output quota by 2mbbl/day

Entrepreneurial trading is a source of value



Some trading terminology

PHYSICAL
the tangible commodity e.g. crude, gasoline, jet fuel

PAPER
financial derivatives e.g. futures, swaps and options

BULLISH
the belief that market prices will rise

BEARISH
the belief that market prices will fall

LONG
to net own a commodity in a market

SHORT
to net owe a commodity in a market

CARGO
a standard size of crude or product traded on a market

LOTS
a standard volume of commodity relating to future contracts

BID
the price at which you are prepared to buy

ASK/OFFER
The price being quoted at which to sell

Cargo trading

A major part of trading involves identifying ways to trade cargoes effectively and trying to extract value from supply and demand of oil. Consider the below:

Offers

FOB Rotterdam	95R	5kt	+3
FOB Rotterdam	92R	5kt	+2
FOB Rotterdam	95R	10kt	+4
CFR Rotterdam	95R	5kt	+2
CFR Antwerp	95R	5kt	+6
CFR Amsterdam	92R	5kt	+8

Bids

Fob Rotterdam	95R	5kt	+4
CFR Antwerp	95R	5kt	+7
CFR Amsterdam	95R	5kt	+10
CFR Amsterdam	95R	5kt	+7
CFR Amsterdam	92R	5kt	+8
FOB Antwerp	95R	5kt	+7
CFR Antwerp	92R	5kt	+6

Freight costs

Rotterdam-Amsterdam:	5kt=$6mt / 10kt=$4mt
Rotterdam/Antwerp:	5kt=$3/mt / 10kt=$2/mt

FOB= Free on Board
CFR= Cost and Freight

What deals can you do on the above? How much money can you make from these deals? (You can only use each bid or offer once)

Some trading terminology

- **BACKWARDATED:** Market structure where prompt prices are at a premium to prices for delivery in the future

- **CONTANGO:** Market structure where prompt prices are at a discount to prices for delivery in the future

- **EXPOSURE:** The extent to which a price change in the market affects your profit or loss

- **FUTURES:** A contract for the purchase or sale of a commodity which is traded for future delivery at a price or pricing formula agreed at the time the contract is entered into.

- **LIQUIDITY:** A market is said to be 'liquid' when it has a high level of trading activity, allowing buying and selling of commodities with minimum price movement.

Exposure Management

Market swap values

December	$943/mt
January	$931/mt
Dec/Jan spread	$12/mt

n.b. **Market cargo value is +4.** Assume you can trade this level at all times.

Trading cargoes

- There is a cargo on offer at January+14 for delivery on December 14-16. **Do you buy it?**
- In the Platts window Shell are bidding for a cargo at $938/mt for January delivery. **Would you sell this bid? How much money do you make/lose? What other risks might this trade indicate compared to the one above?**
- A cargo is offered by Trafigura at December-7 for delivery 10-20 January. **Would you buy this? If it were a bid would you sell it? How can you make sure you don't lose money? What if the real market for Dec/Jan was 11/13?**