J Low Law Corporation

CAFRAL Seminar on Hedging Oil Requirements
of Indian Oil Marketing Companies
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Mumbai

Analysing legal risks in hedging and documentation of derivatives

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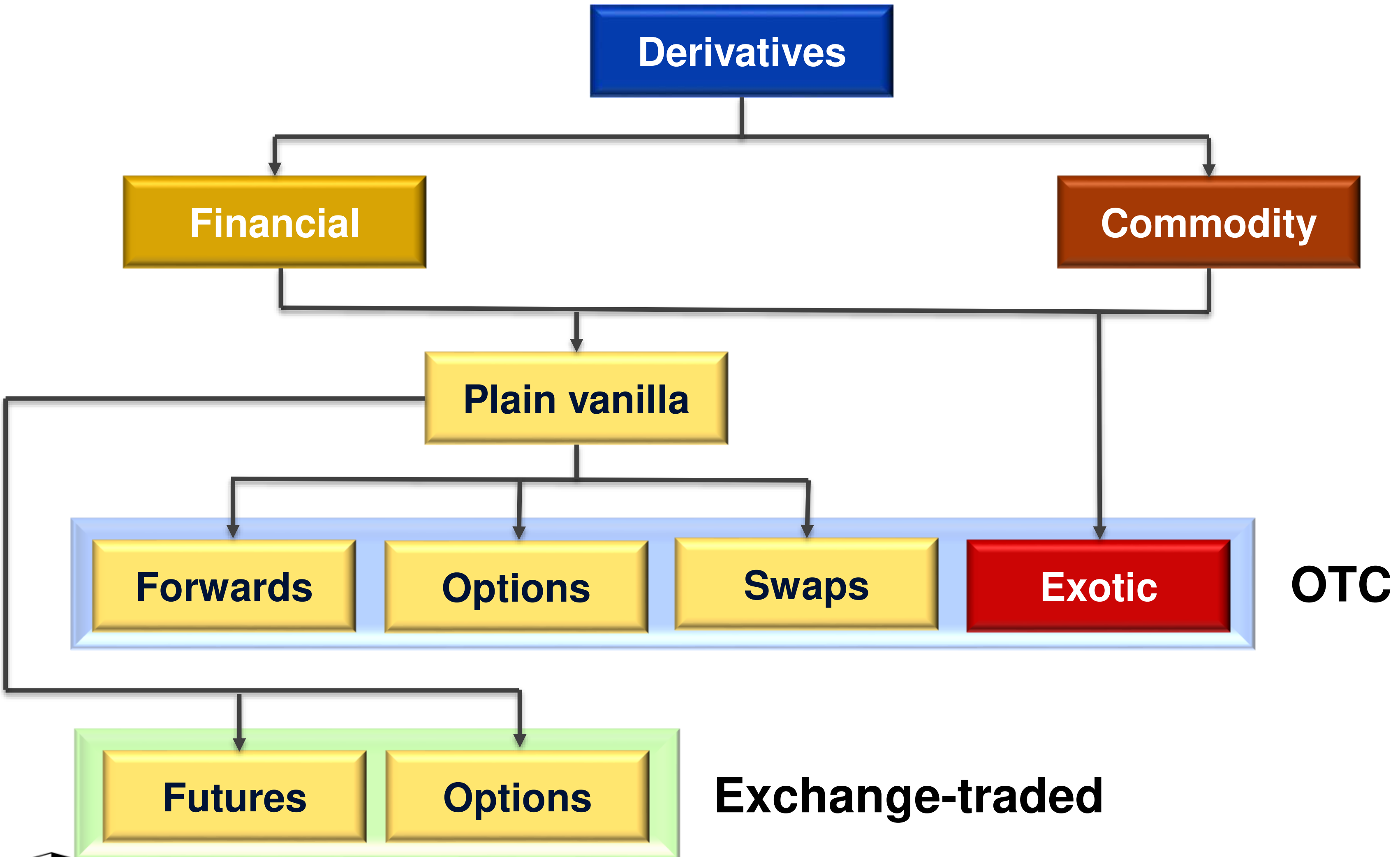
WHAT ARE DERIVATIVES?

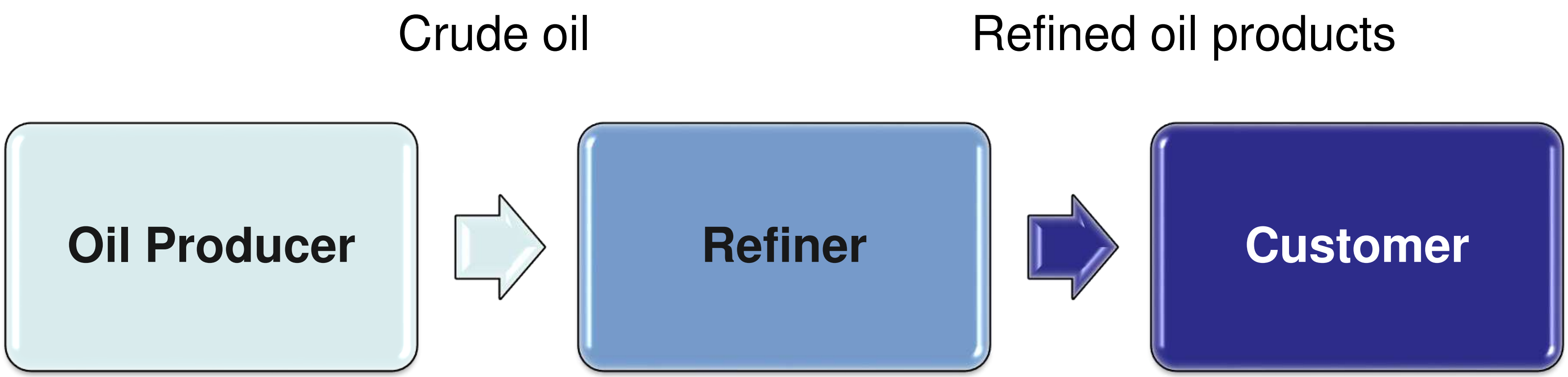
Derivatives



WHAT IS A HEDGE?

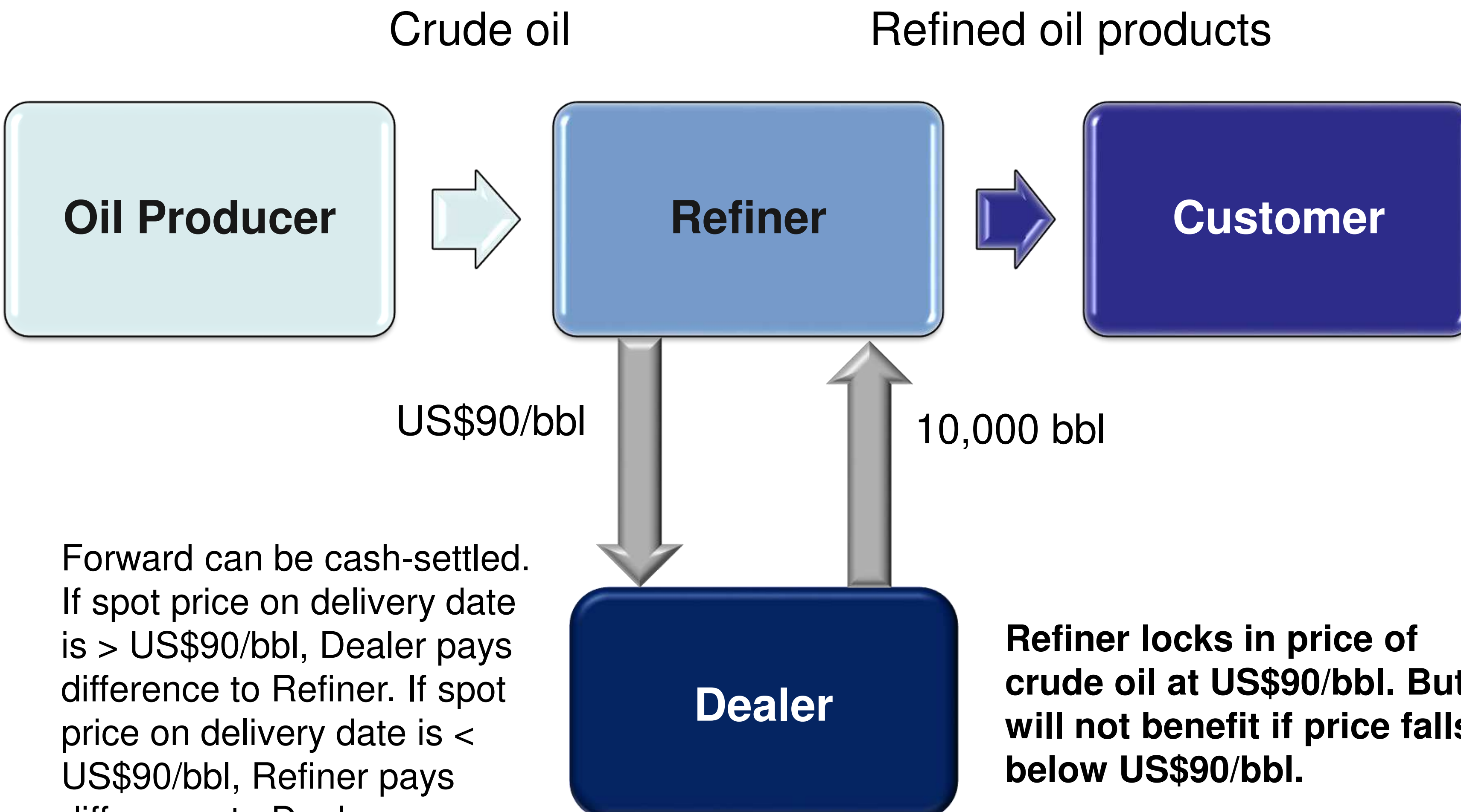

Just kidding

Examples



Refiner wants to hedge its crude oil cost

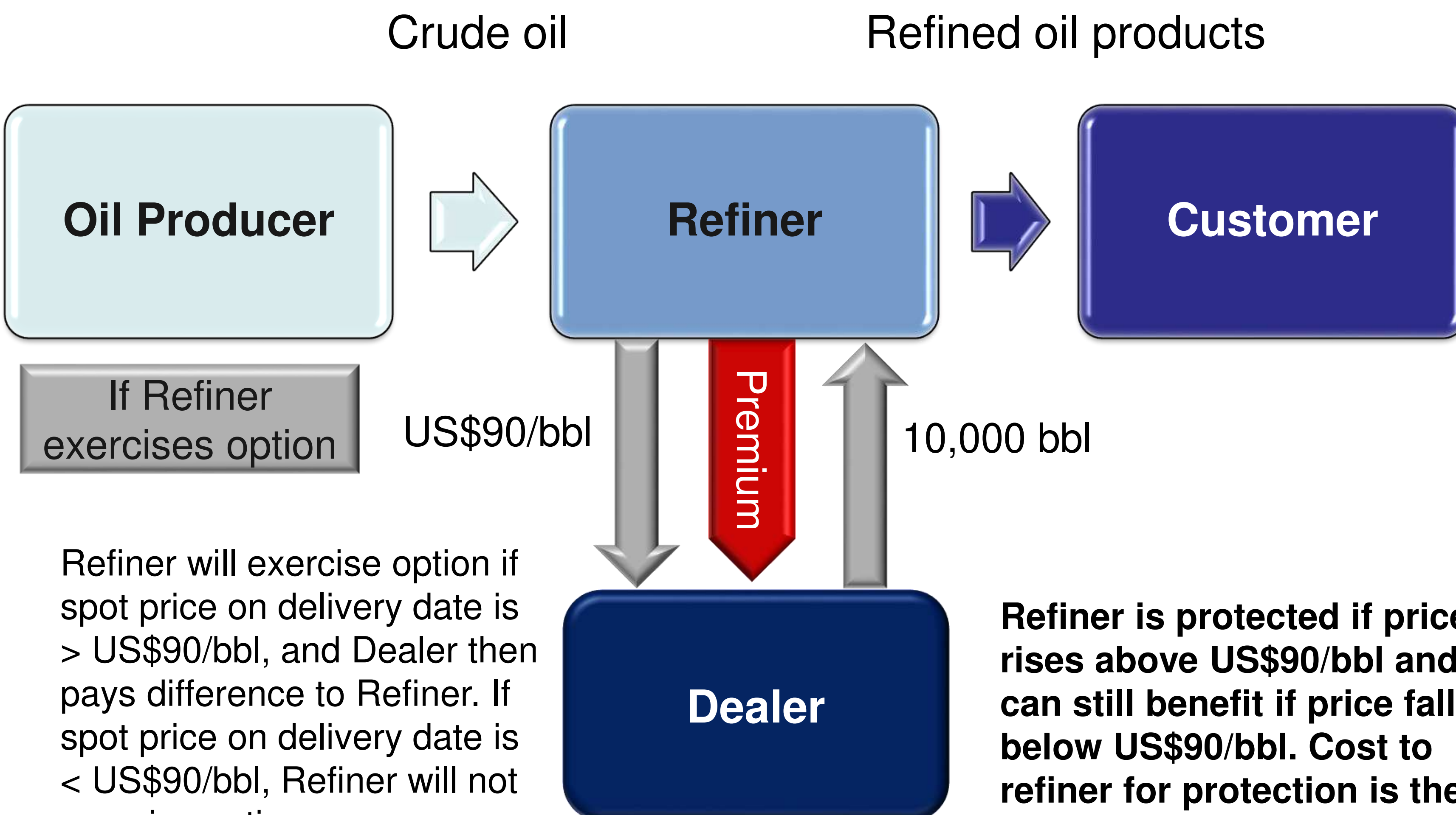
Using a forward



Forward can be cash-settled. If spot price on delivery date is > US$90/bbl, Dealer pays difference to Refiner. If spot price on delivery date is < US$90/bbl, Refiner pays difference to Dealer.

Refiner locks in price of crude oil at US$90/bbl. But will not benefit if price falls below US$90/bbl.

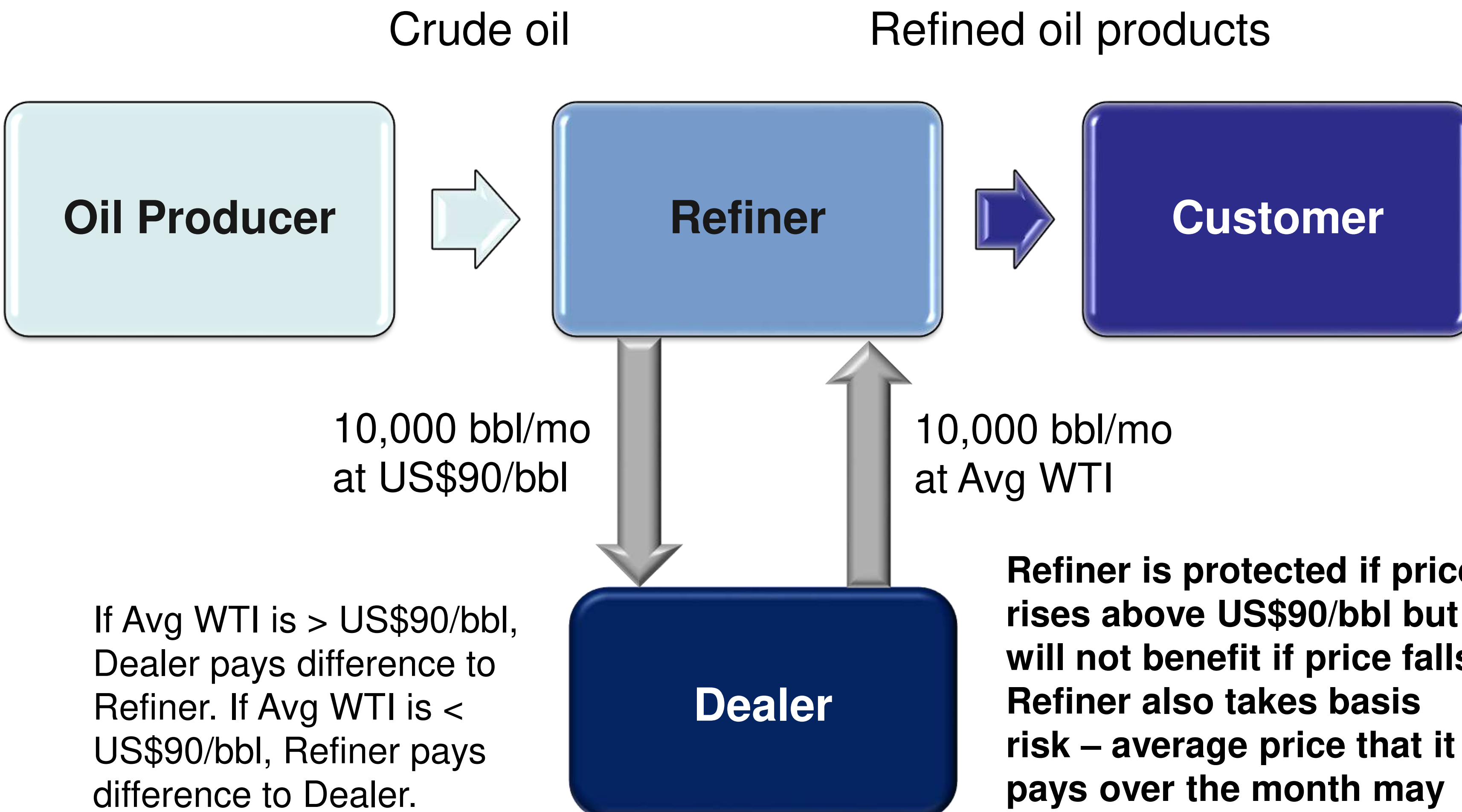
Using an option



Refiner will exercise option if spot price on delivery date is > US$90/bbl, and Dealer then pays difference to Refiner. If spot price on delivery date is < US$90/bbl, Refiner will not exercise option.

Refiner is protected if price rises above US$90/bbl and can still benefit if price falls below US$90/bbl. Cost to refiner for protection is the premium.

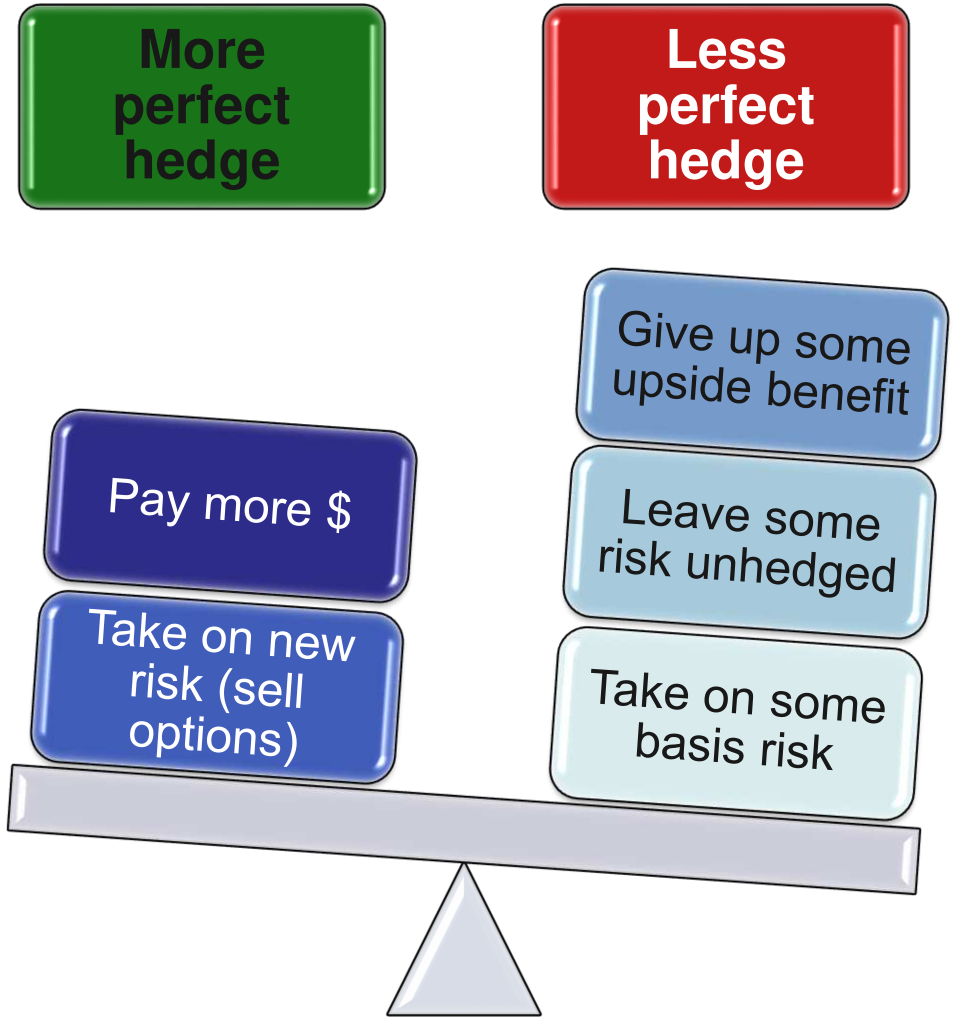
Using a swap



If Avg WTI is > US$90/bbl, Dealer pays difference to Refiner. If Avg WTI is < US$90/bbl, Refiner pays difference to Dealer.

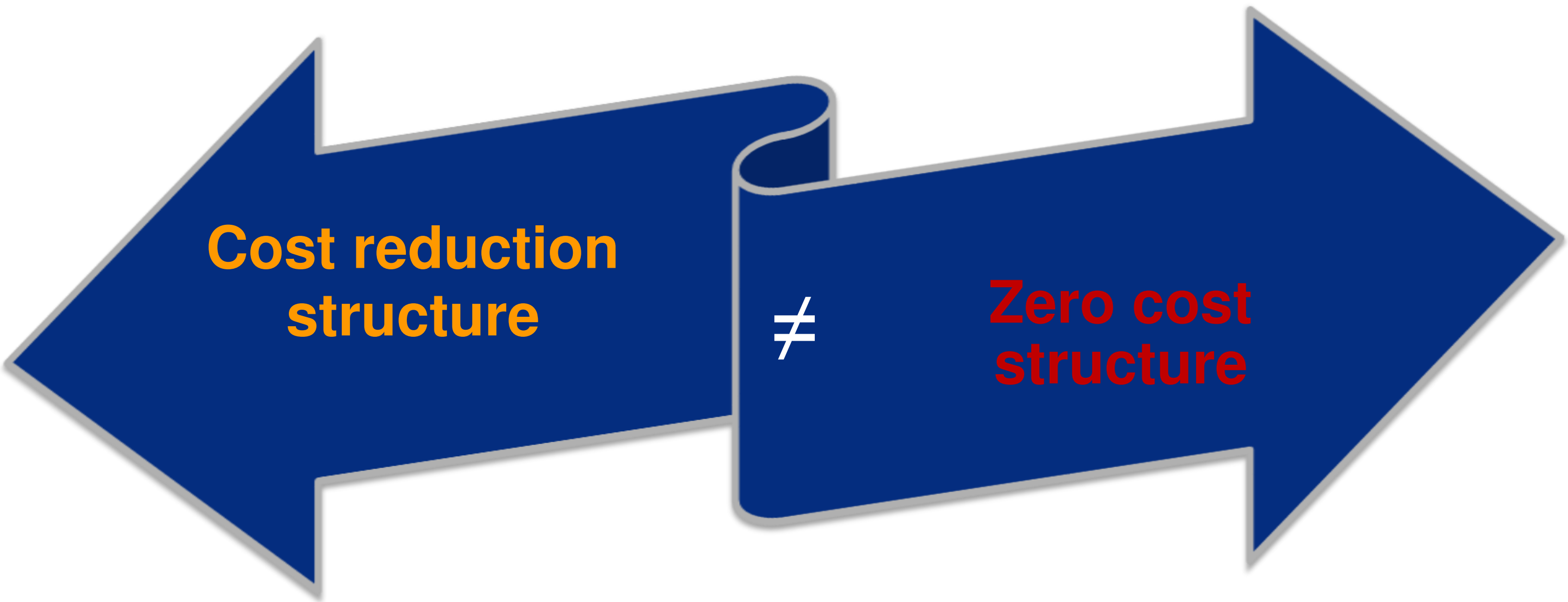
Refiner is protected if price rises above US$90/bbl but will not benefit if price falls. Refiner also takes basis risk – average price that it pays over the month may differ from Avg WTI over that month.

Hedging


More perfect hedge
Less perfect hedge
Give up some upside benefit
Pay more $
Leave some risk unhedged
Take on new risk (sell options)
Take on some basis risk

REMEMBER

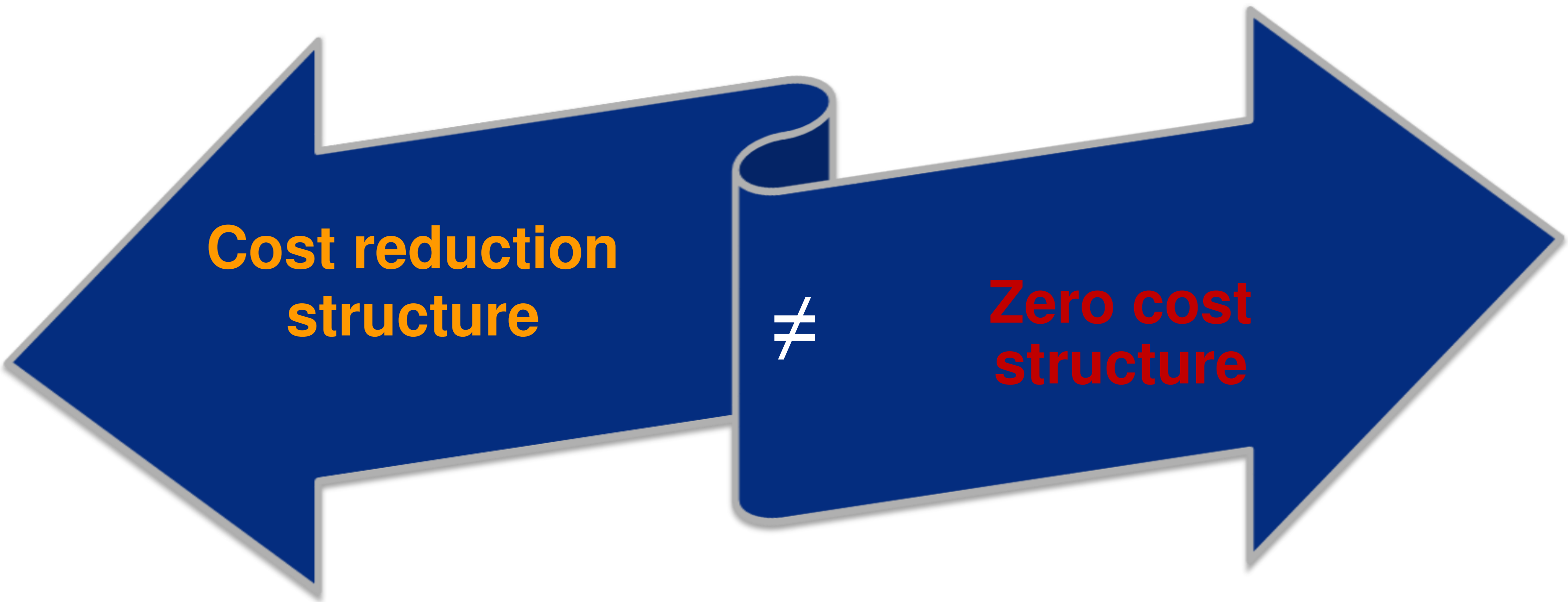
Cost reduction and zero cost structures



Results in less than perfect hedge.

Must involve sale of options by hedgor so hedgor takes on new risk.

Examples



Earlier option example but with a KI at US$95 and KO at US$70.

Zero cost collar –
Dealer pays difference if price > US$90/bbl.
Refiner pays difference if price < US$60/bbl.

Past cases

CPC entered into zero cost collars with a number of banks to hedge crude oil price in 2007.

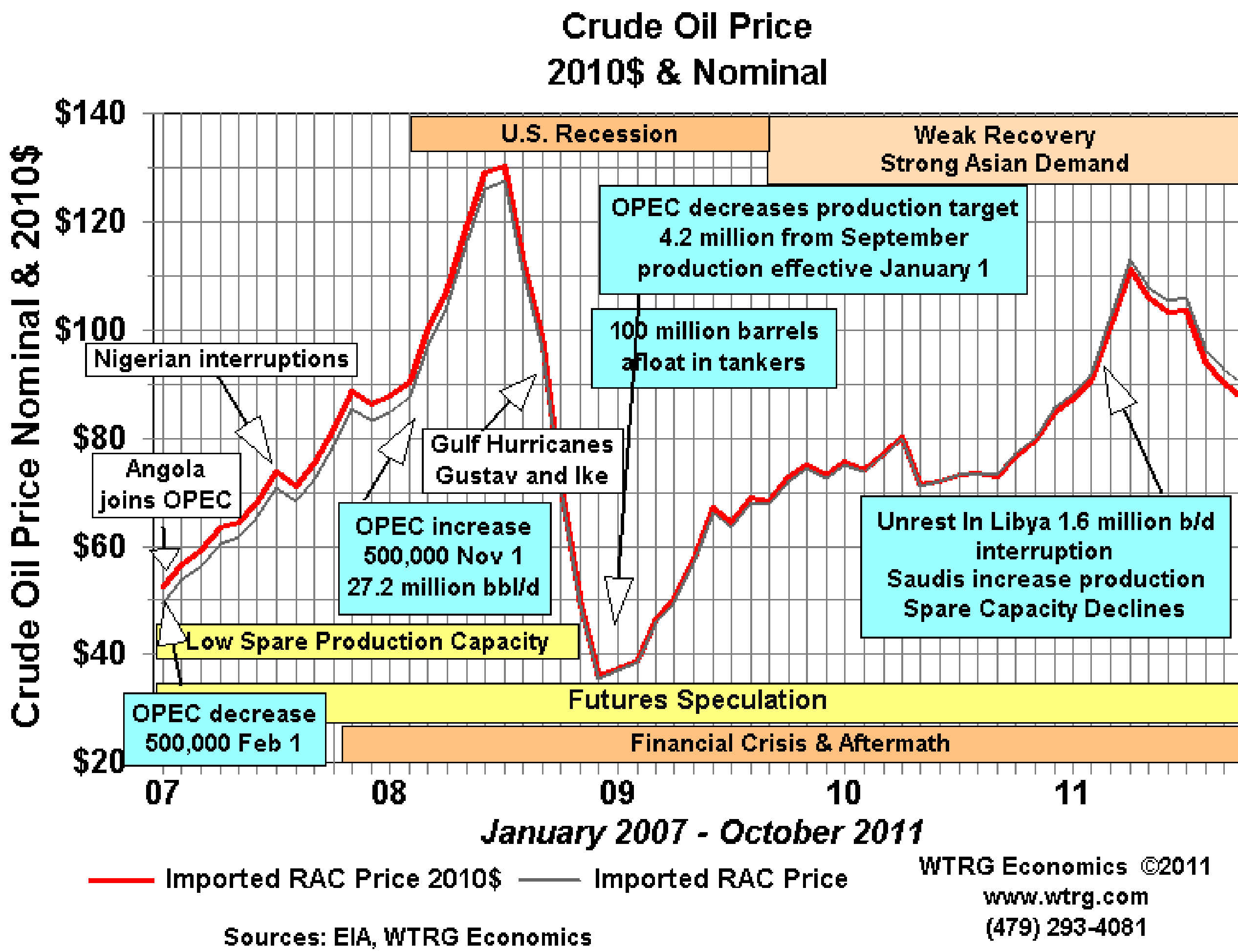
- Ceiling of US$130/bbl, floor of US$100/bbl. Bank pays difference if price above ceiling. CPC pays difference if price below floor.
- If price above ceiling, CPC can buy up to 100,000 bbl/mo. If price below floor, CPC must buy 200,000 bbl/mo.
- KO if price stays above ceiling for 3 consecutive months. KO if price stays below floor for 12 consecutive months.

Instead of just hedging its jet fuel price risk, CAO started to trade.

- In 2003, CAO had bullish view so sold puts and bought calls. Correct view so made money
- Towards end-2003, CAO changed to bearish view so bought puts and sold calls. Wrong view.
- But instead of closing-out positions, CAO restructured its positions by buying back the short-dated options and seliing longer-dated options.

Based on news reports and market talk.

Crude oil price



Questions to ask

- What are you trying to achieve?
- Do you understand the transaction?
- What is your worst-case scenario?
  - How much will you lose if it happens?
  - How are you going to manage this risk?
- Can your risk management system/process handle the transaction?
- Can your financial reporting system/process handle the transaction?
- What are the regulatory compliance requirements?

When in doubt, GET ADVICE

INDIAN REGULATIONS

Current position

Onshore

- OTC commodity derivatives restricted by Forward Contracts (Regulation) Act 1952.
- Banks in India restricted from entering into OTC commodity derivatives by Banking Regulation Act 1949.

Cross-border

- Indian resident can enter into OTC and exchange-traded commodity derivatives subject to compliance with:
  - Foreign Exchange Management Act 1999.
  - Foreign Exchange Management (Foreign Exchange Derivative Contracts) Regulations 2000.
  - RBI's notices, in particular, RBI's Comprehensive Guidelines on Over the Counter (OTC) Foreign Exchange Derivatives and Overseas Hedging of Commodity Price and Freight Risks.

DOCUMENTATION

Documentation process

Pre-trade

Negotiating and executing the ISDA Master Agreement

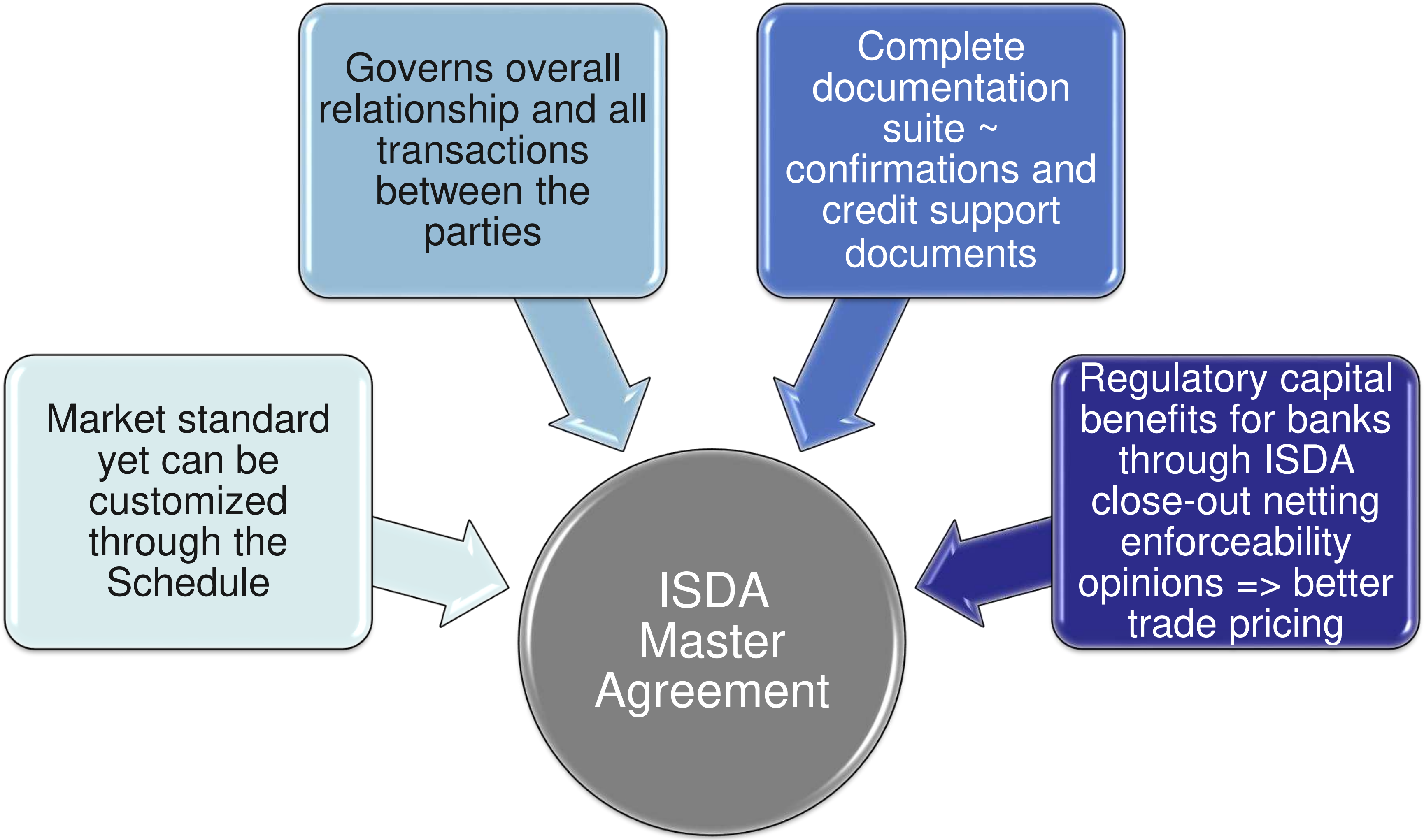
The trade

Exchanging front-office confirmation

Post-trade

Exchanging back-office confirmation

Why the ISDA Master Agreement



ISDA document architecture