

# **Asian Premium of Crude Oil and Importance on Preparation of Oil Market in Northeast Asia**

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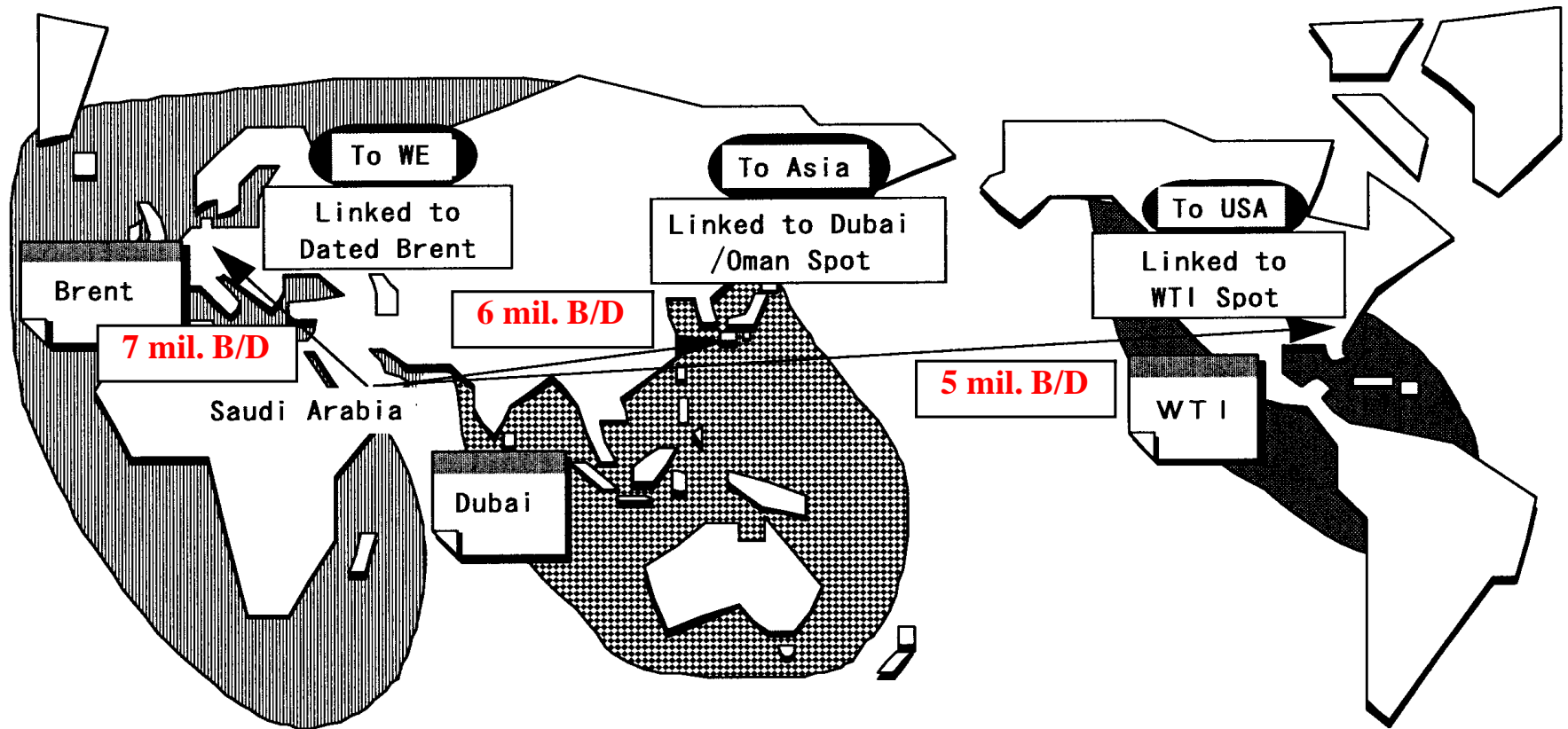
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# Crude Oil Pricing System since 1987



Pricing formula :

$$P_x = P_m \pm a$$

$P_x$  : Crude oil export price set by producing country

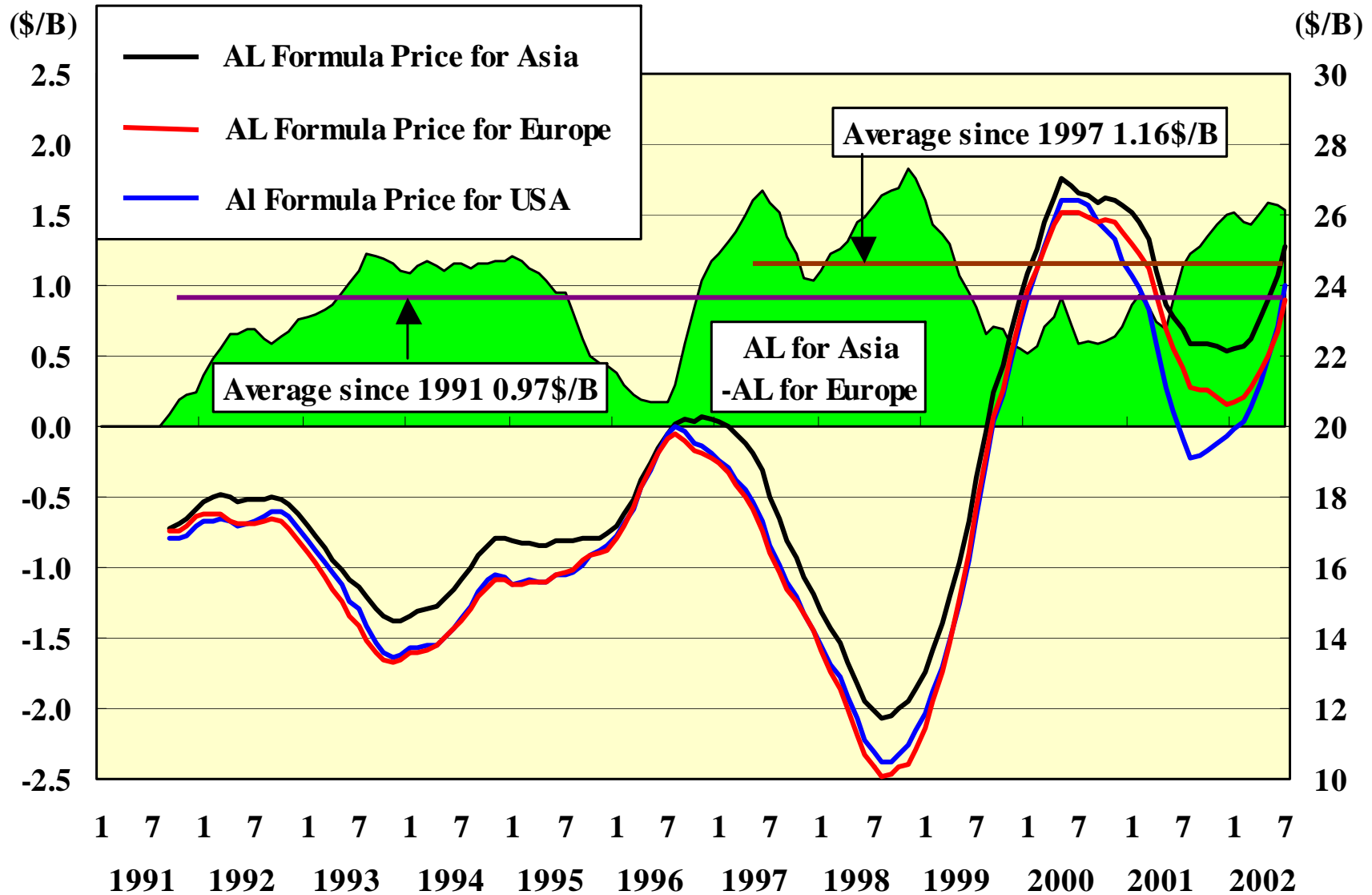
$P_m$  : Marker crude spot price

$a$  : Adjustment factor

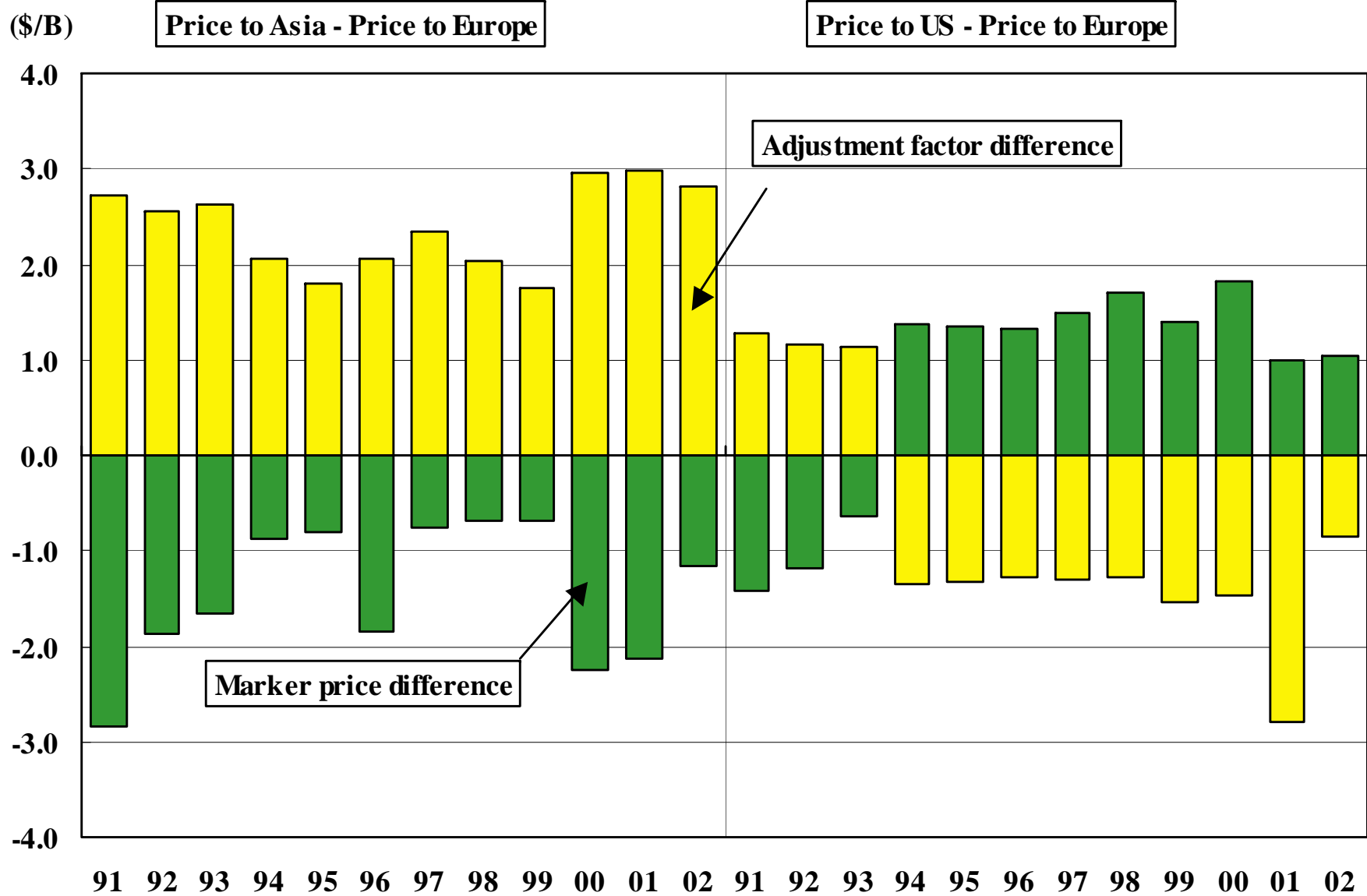
**Marker Crude**

Crude oil which provides the benchmark price in a given crude oil market

# Asia Premium of Crude Oil

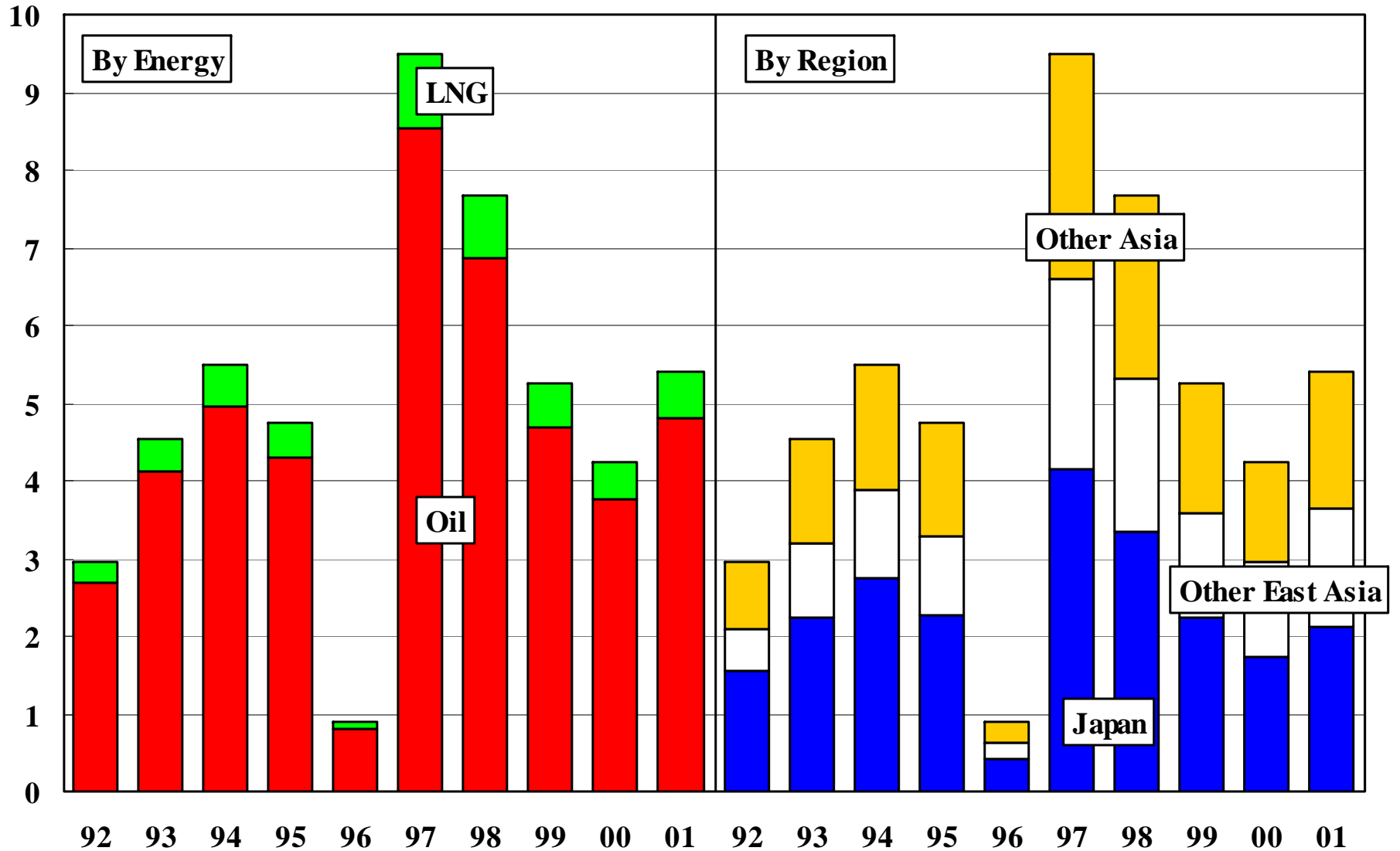


# Difference between Marker Prices and Difference between adjustment factors



# Income Transfer due to Asian Premium of Crude Oil

(Billion \$)

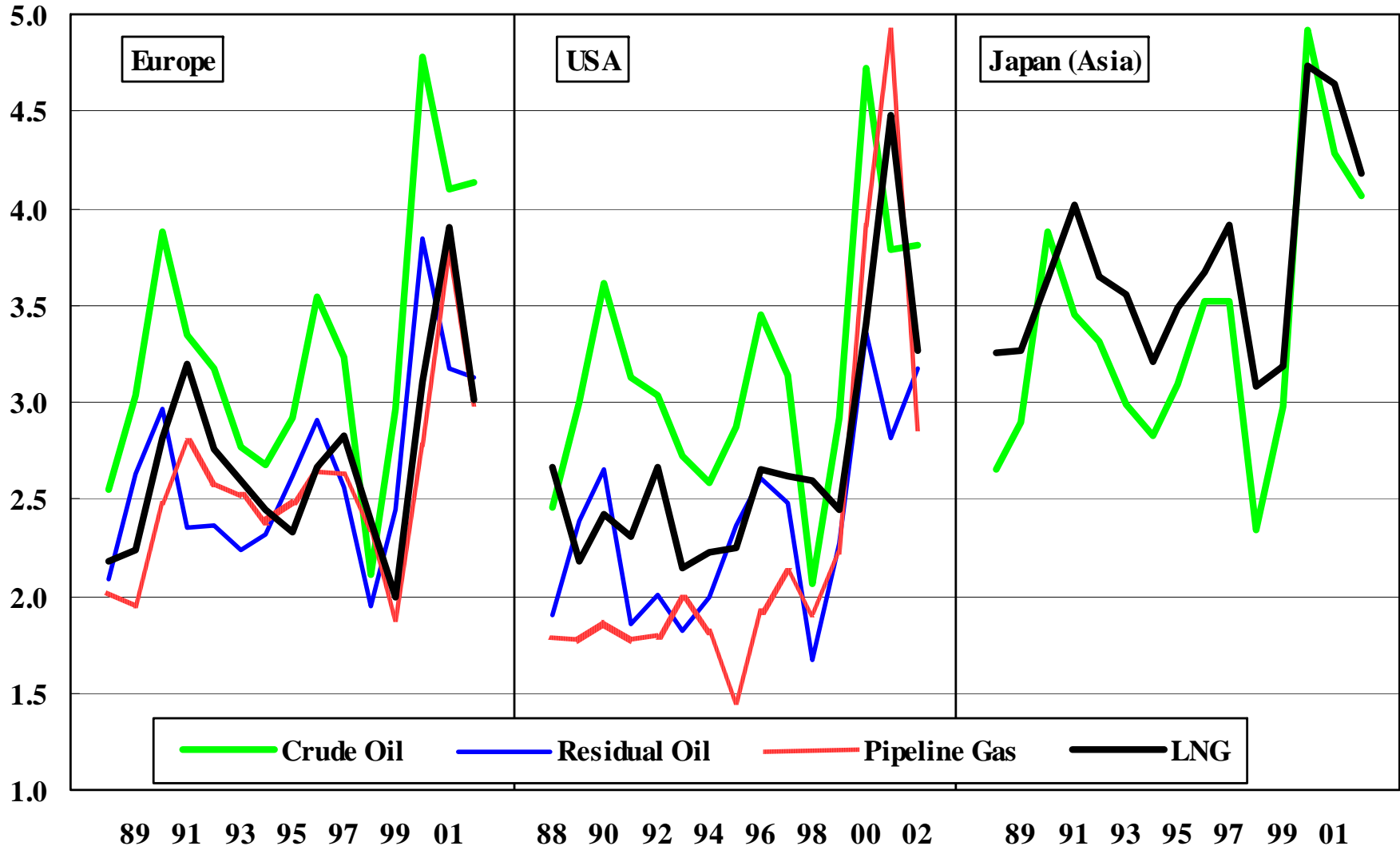


# Asia Premium Having Large influences to International Competitiveness in Economy

- **Additional income transfer of 5 to 10 billions \$ from Asian consuming countries to oil producing countries**
- **Worsening refinery margin since 1999—recently expanded to minus value of about 1\$/B**
  - # reducing refinery margin due to demand slowdown and surplus refining capacity since 1997
  - # minus refinery margin due to higher crude oil price since 1999
  - # lowering refinery operation in Singapore, Korea and so on
- **Asia Premium is not limited to oil but exposed on whole energies**
  - # Price of other energies such as LNG is raised through crude oil price
  - # LNG has an original problem for Asian premium
  - # LPG contract price showing ups and downs like emergency time – one-way force by producing countries

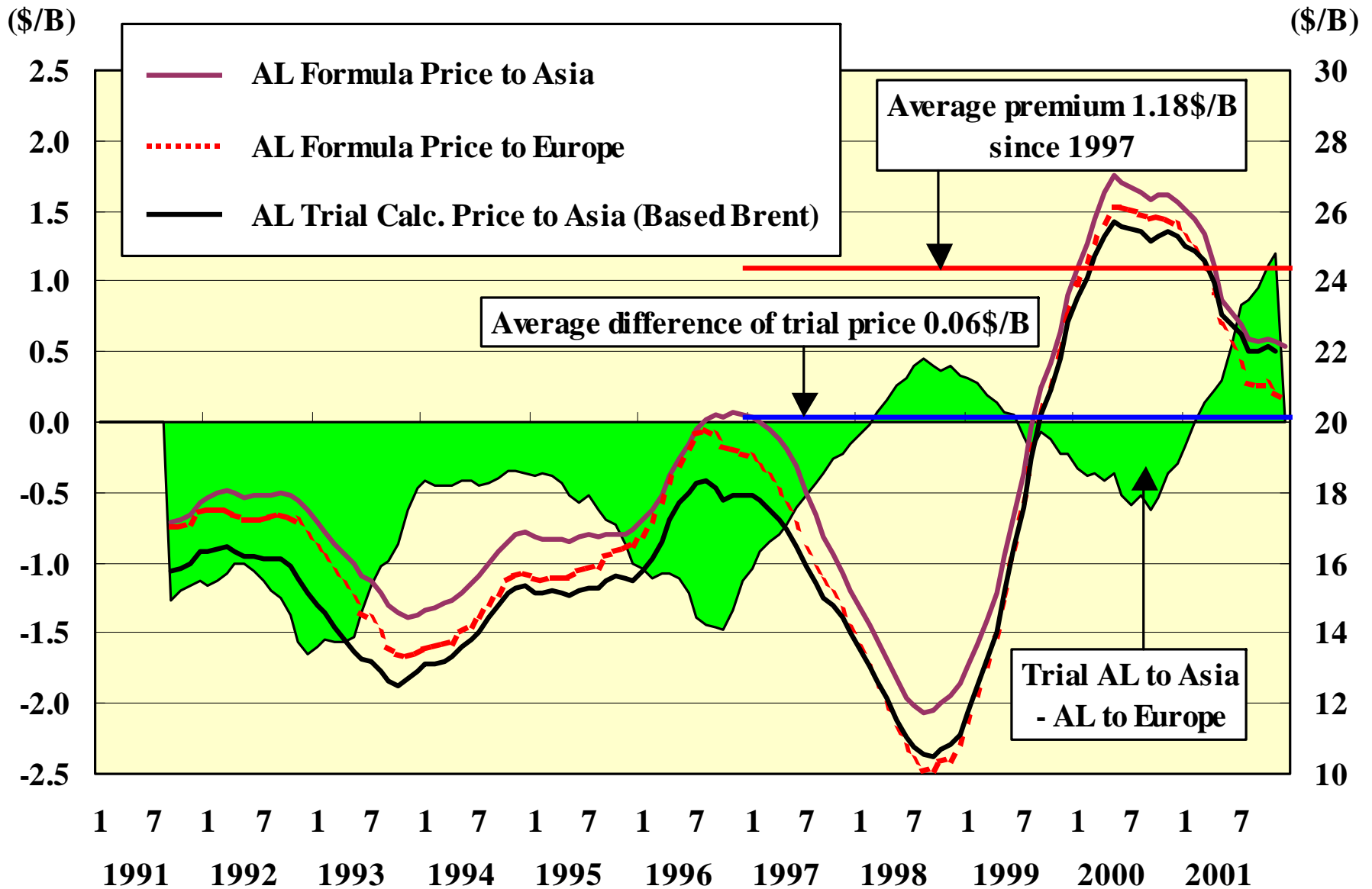
# Asian Premium of LNG

(US\$/MMBtu)





# Proposal (1) : Pricing Based on Brent

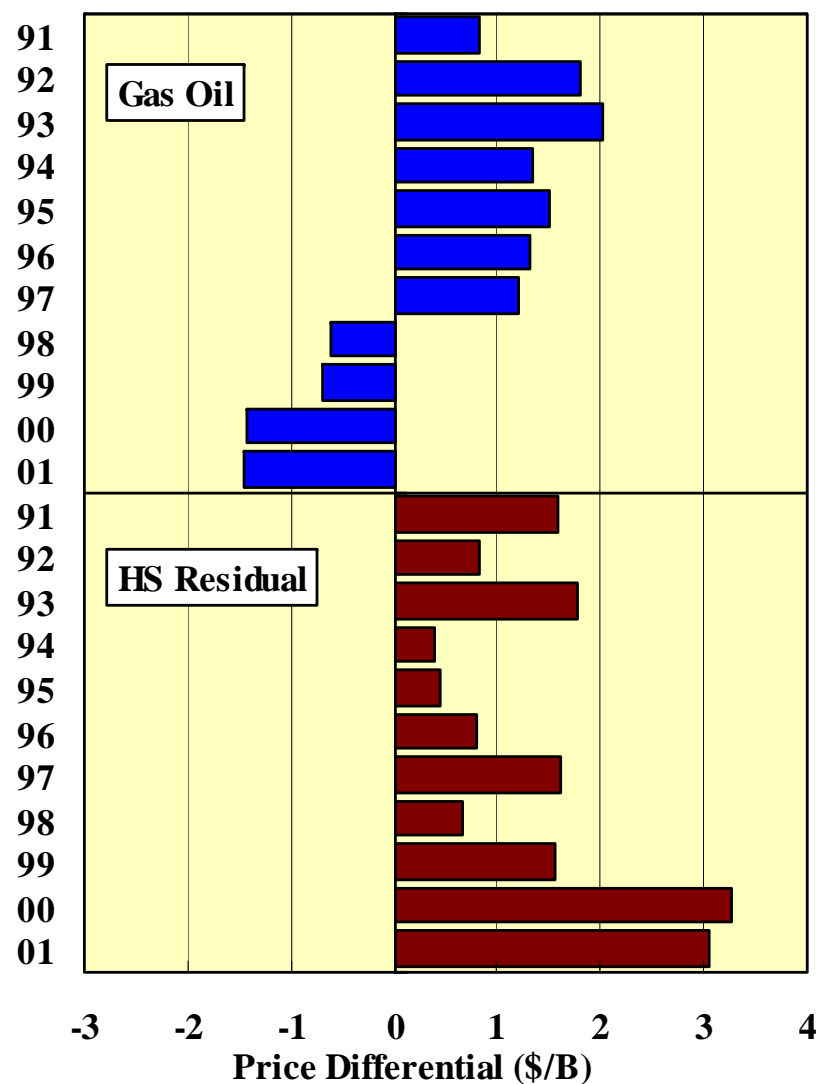
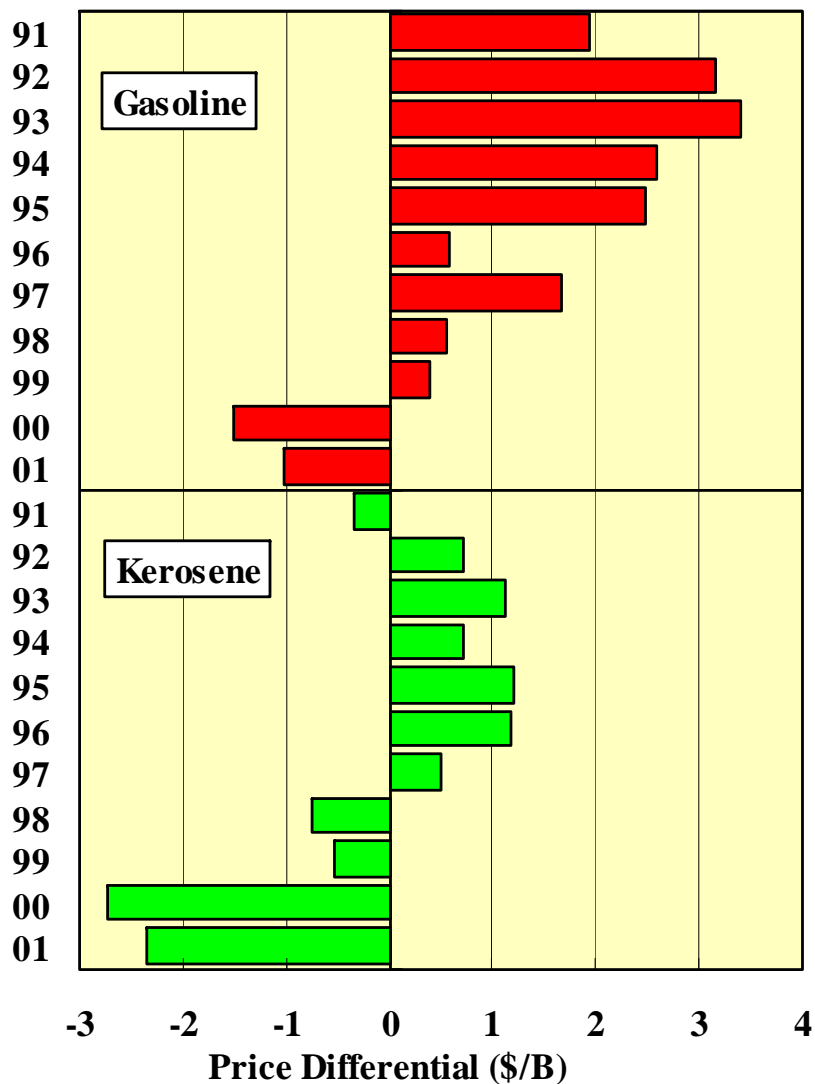


# Problems in Pricing Proposal (1)

- **Price formation not reflecting oil supply-demand in Asia**
  - # Brent price is formed with reflecting oil supply-demand in Europe
  - # Easy to be influenced by special problems in US oil supply-demand
  - # Not always consistent with oil supply-demand environments in Asia
- **Problems of price manipulation due to production decrease in Brent**
  - # The existence of price manipulation such as notorious squeeze
  - # Twin market relation between physical spot / forward and IPE future

# Product Price Difference between Singapore and Rotterdam

(Singapore price – Rotterdam price)



# Importance of Oil Market Preparation in Asia



- **Oil market not prepared in Northeast Asia, large consuming area**

- # Large consuming area with oil demand of 12 millions B/D which is a similar size to Europe/US

- # Oil market is not prepared in the center of large consuming area

- # Singapore market is a just intermediate position for northeast Asia

- # Necessary to send information signals reflecting energy competitive relations in large consuming area

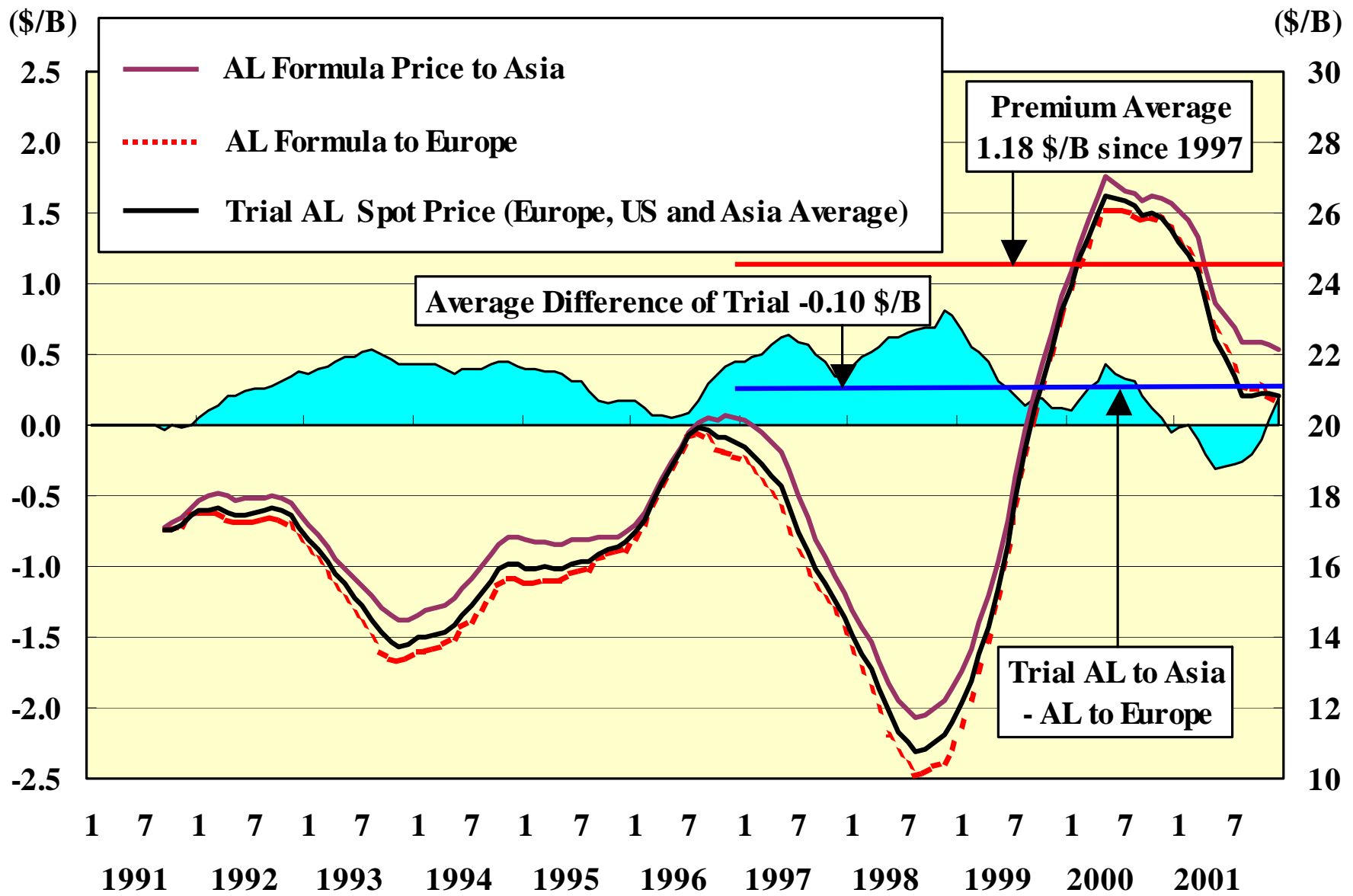
- **Required conditions for preparation of oil product market in Asia**

- # Streamlining and expansion of oil product trades within Asian region

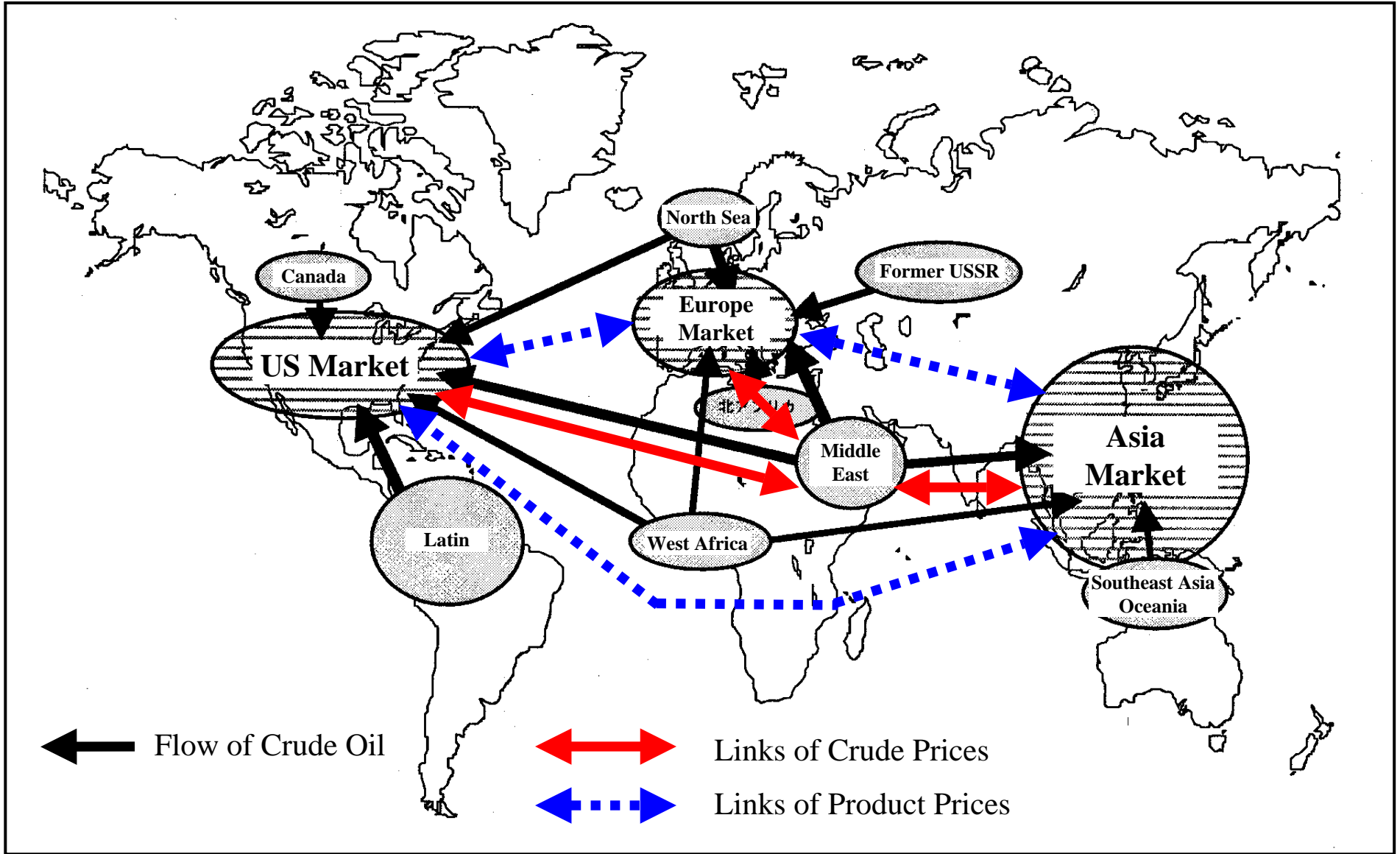
- # Deregulation and privatization of oil industries in Asian Consuming Countries

- # Unification for quality standard of oil products in Asia

# Proposal (3) : Pricing Based on AL Spot Prices



# Global Links of Oil Markets



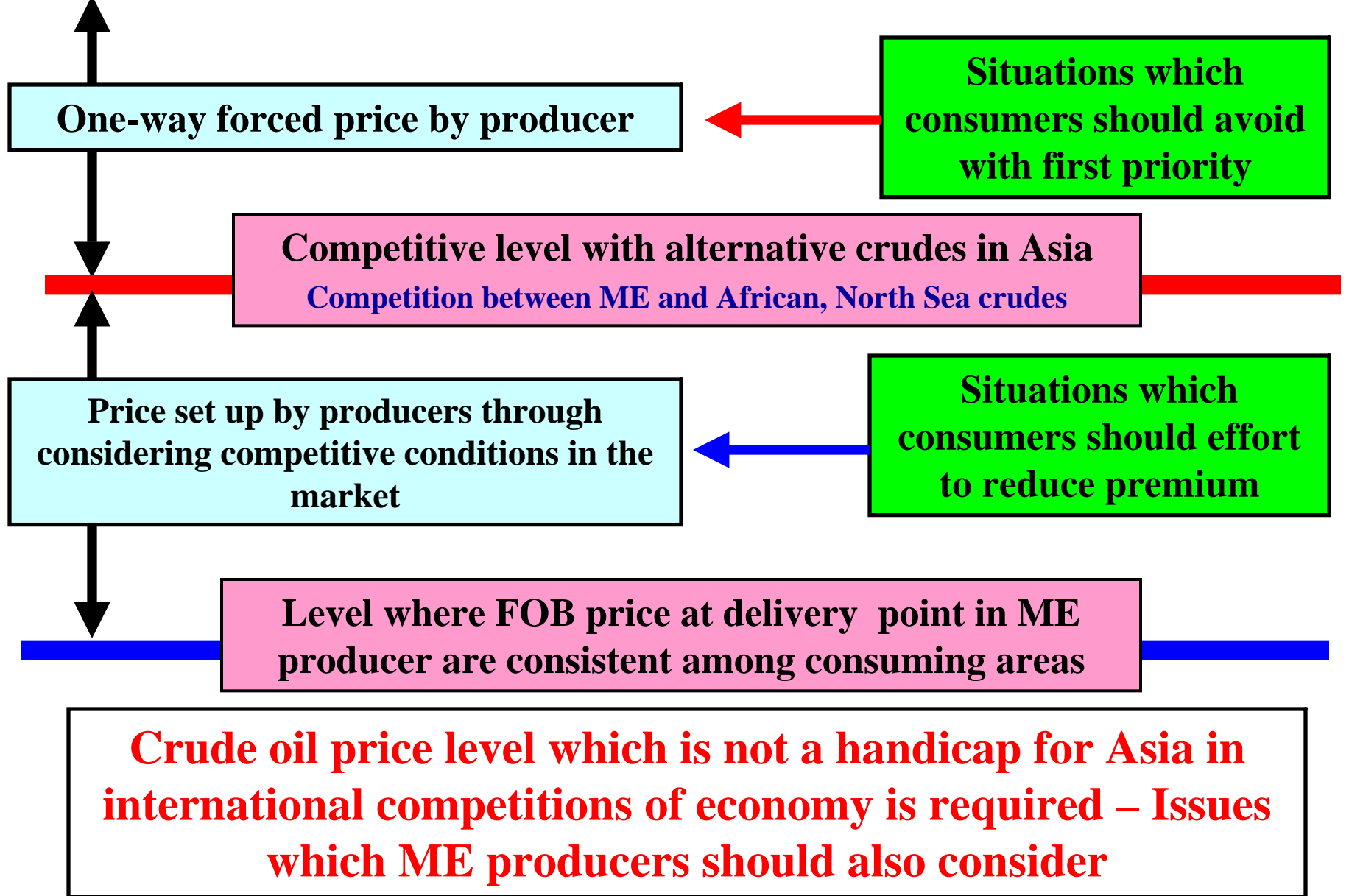
# Spot Trading of Middle East Crudes and Stabilization of Crude Oil Price



- **Factors affecting violent fluctuations of crude prices**
  - # Too high OPEC price band and production controls
  - # Weakened supply cushions such as insufficient refining capacities and low level of oil inventory
  - # Overshooting reactions in future market and bottlenecks in spot market
  - # Reflection of marginal supply-demand by marginal price marker
- **Formation of marker price by spot trading of ME crudes**
  - # ME crudes are the mainstream reflecting global supply-demand balance
  - # Without direct interventions, spot trading is consistent with production controls
  - # Stabilization of crude prices is serious subject also for oil producers

Some room to suggest the adoption of spot trading to oil producers from the viewpoint of stabilization of crude prices?

# Viewpoints on Crude Oil Price Level in Asia





# Middle and Long-term Subjects aiming at Reducing Asian Premium



- **Preparation of oil product markets in northeast Asia and Asia**
  - # Streamlining and expansion of oil markets in various consuming areas
  - # Formation of the linkages of oil markets between Asia and Europe/US
- **Developments of alternative crudes except ME crudes**
  - # Procurement of increasing crude oils in the West of Suez such as West African crudes
  - # Developments of neighboring oil resources such as Sakhalin and east Siberia
  - # Developments of liquid fuels (GTL) from coal and natural gas
- **Further reinforcement of flexibilities in consuming areas**
  - # Flexible combinations of crude oil processing and oil product import/ export
  - # Reinforcement of flexibilities in fuel selection in consumer sides