Causes and Proposals for Asian Premium

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Attitudes Towards Asian Premium

- A new Research Fruit at new century
- Asian Premium: Exist or Not?
  - Voices of non-existence
    - Mideast Producers
    - CERA
  - Voices of Existence: Asianpremiumoloy
    - IEEJ
    - KEEI
    - Facts Inc.
    - ASEAN10+3

Asian Premium Study in China

- Oil Industry: more consciousness
- Government: no official remarks
- Academic Circle: Little comments
  - Only 1 article published in Chinese on Journal (IPE, 2001);
  - Only 2 searching results via Chinese on net
  - Only several reference reports but in English
- ETC: as an institute of CNPC, a SOE, can be a representative of the above 3 groups, and has the responsibility to make contribution to Asian Premium Study

Outline

I. Facts of Existence

II. Causes for Existence

III. Options for Measures

IV. Conclusion

Facts of Existence

- A premium of 1-1.5$/b has been proved by huge amount of data
- Such premium exists continuously for a long period of time
- Similar premium exists not only in crude oil but also other energy

Figure 1: Average Import Price of Crudes from Middle East, 2001($/b)

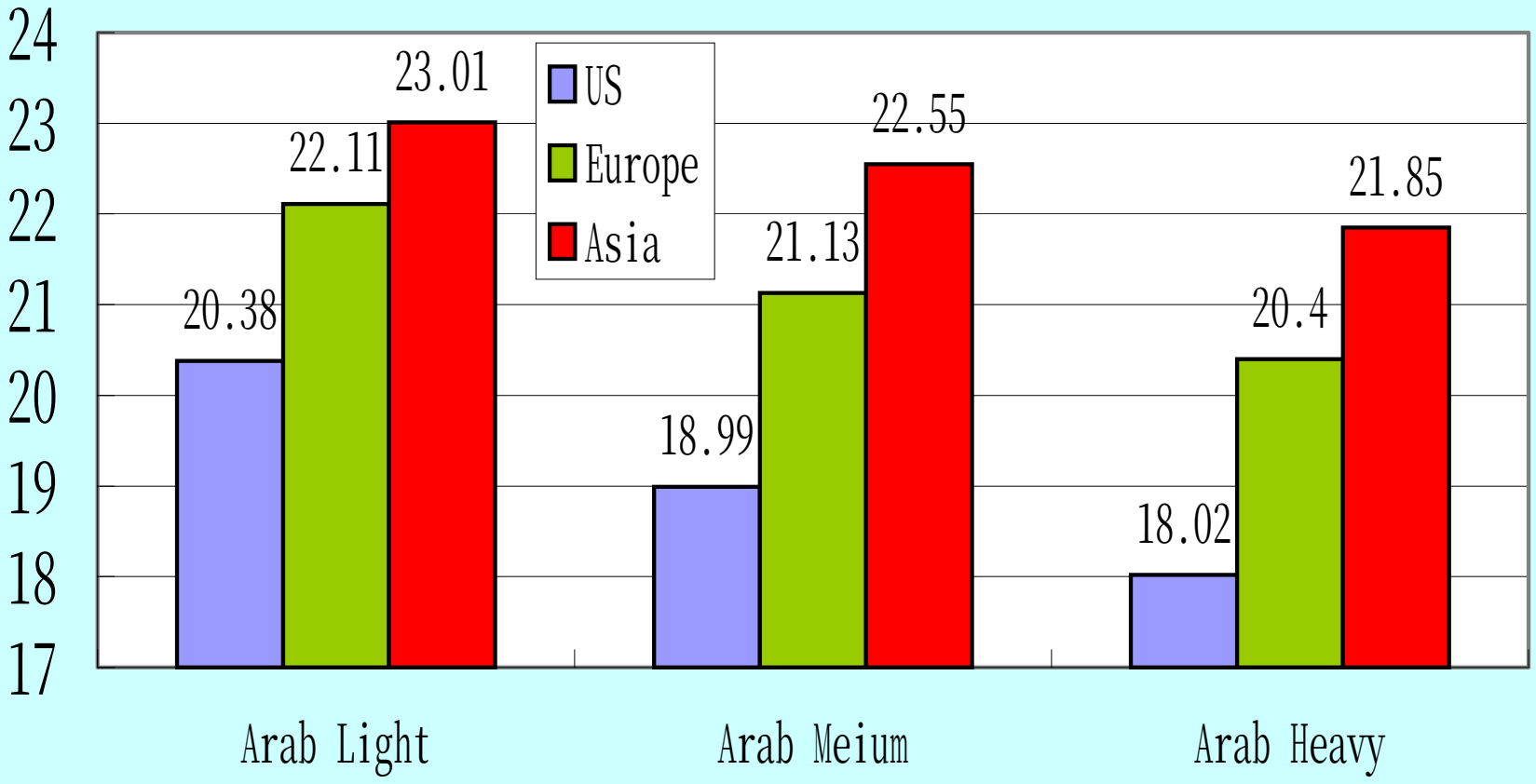


Figure 2: Average Import Price of Crudes from Middle East, 1999 ($/b)

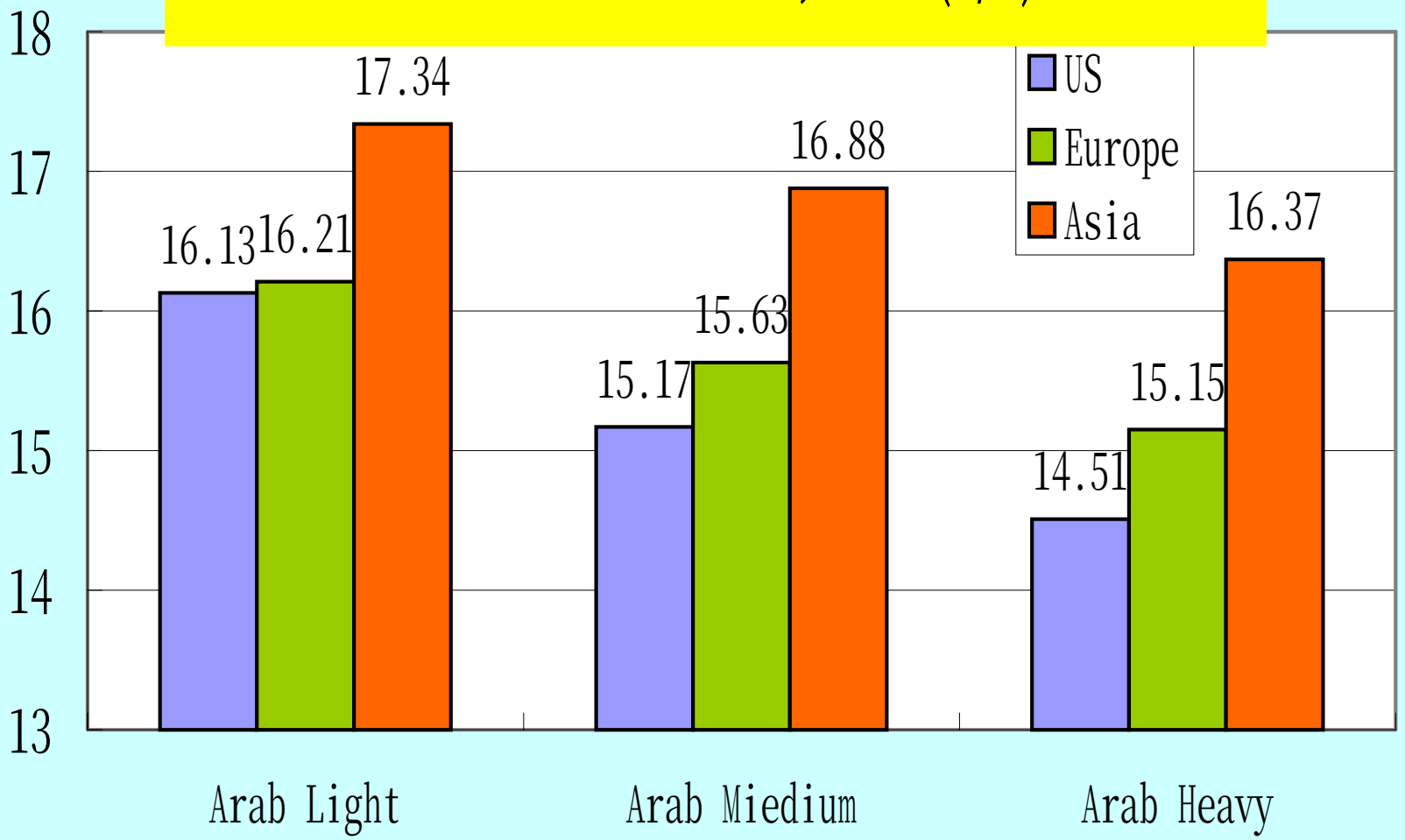


Figure3: Average LNG Import Prices ($/Mbtu)

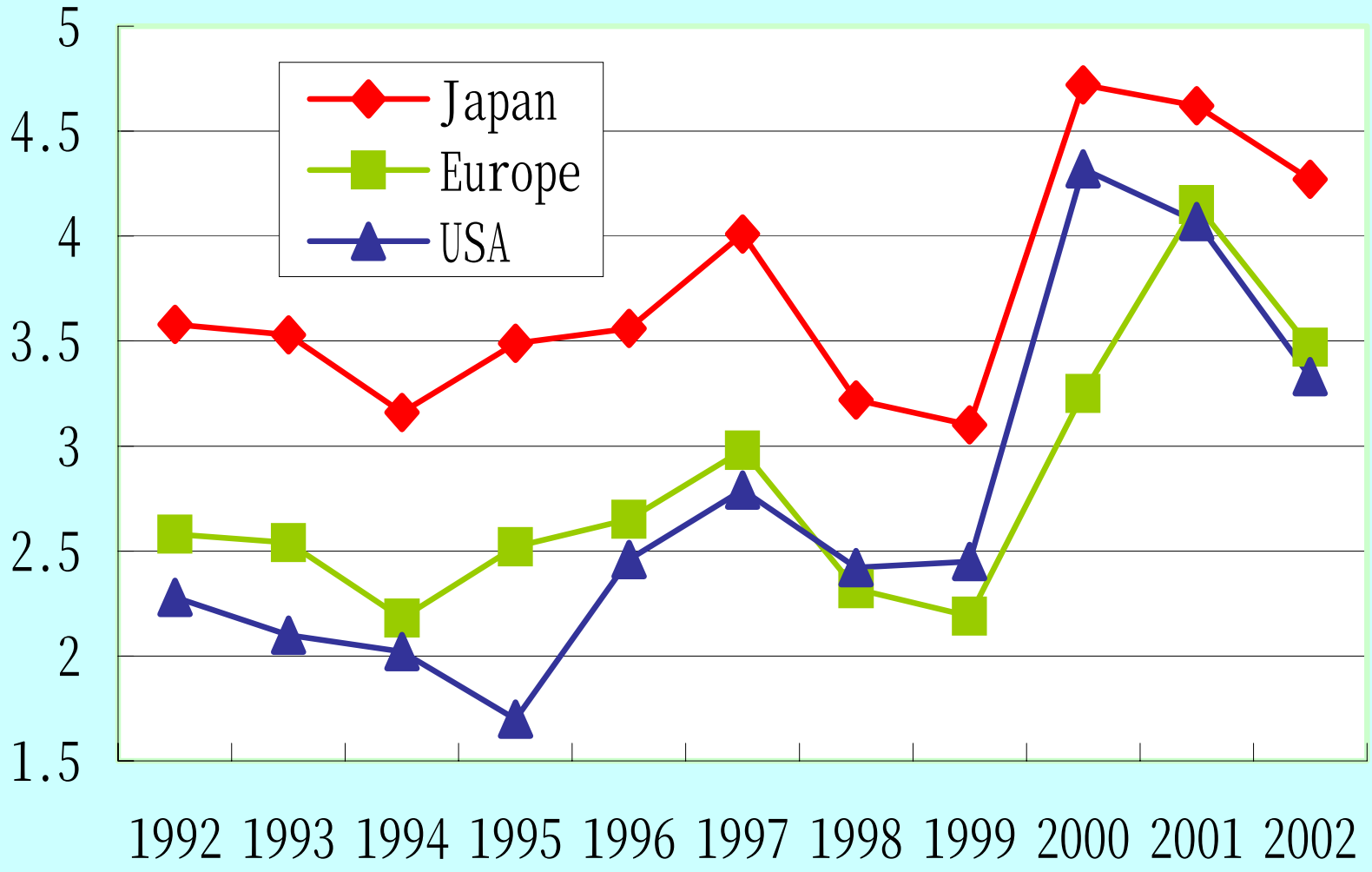


Figure 4 Annual Average Formula Prices of ALC to US, Europe and Asia, 1989-2001 (D/B)

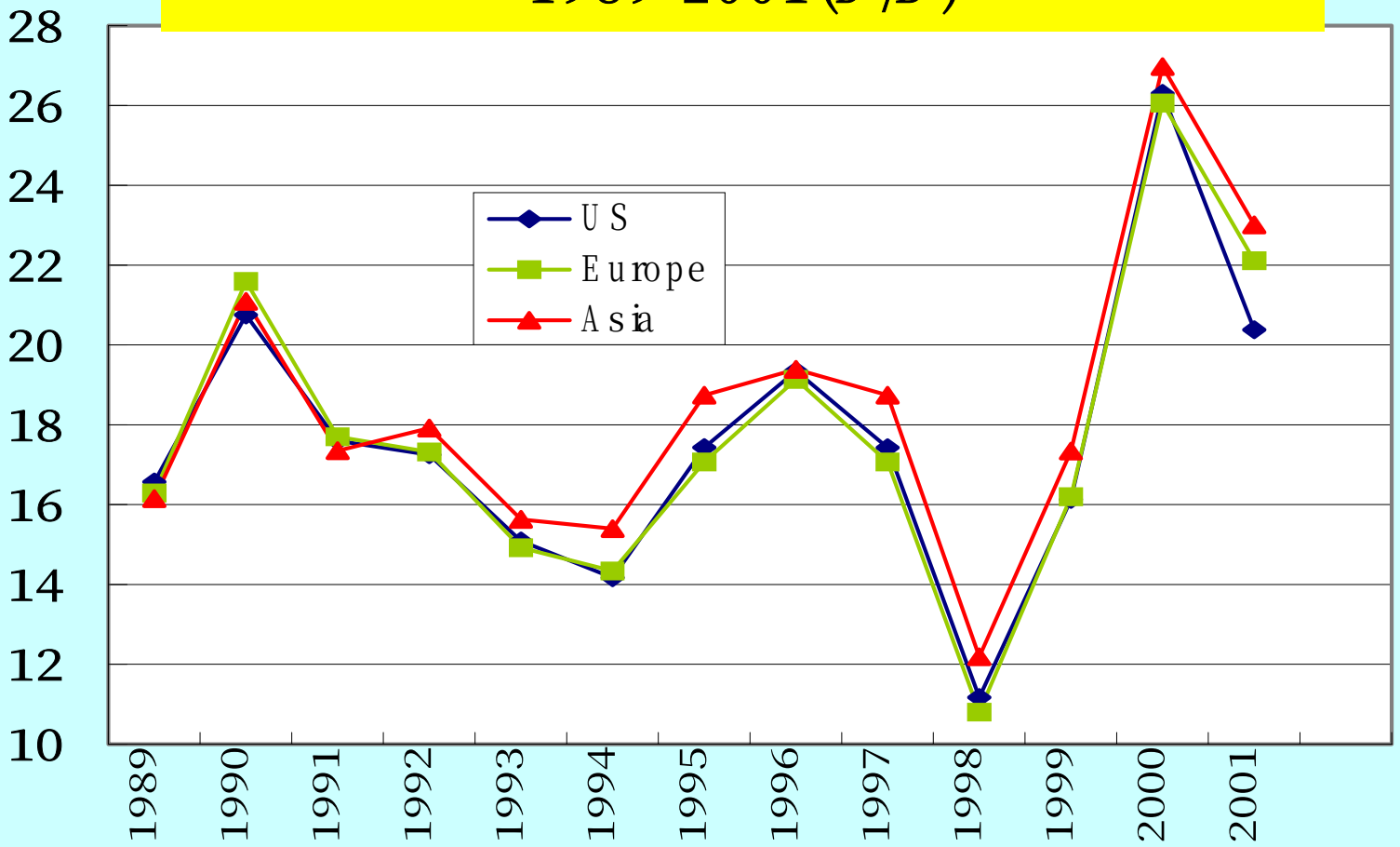


Figure 5: Annaual Average Spot Prices for WTI, Brent and Dubai, 1989-2002($/B)

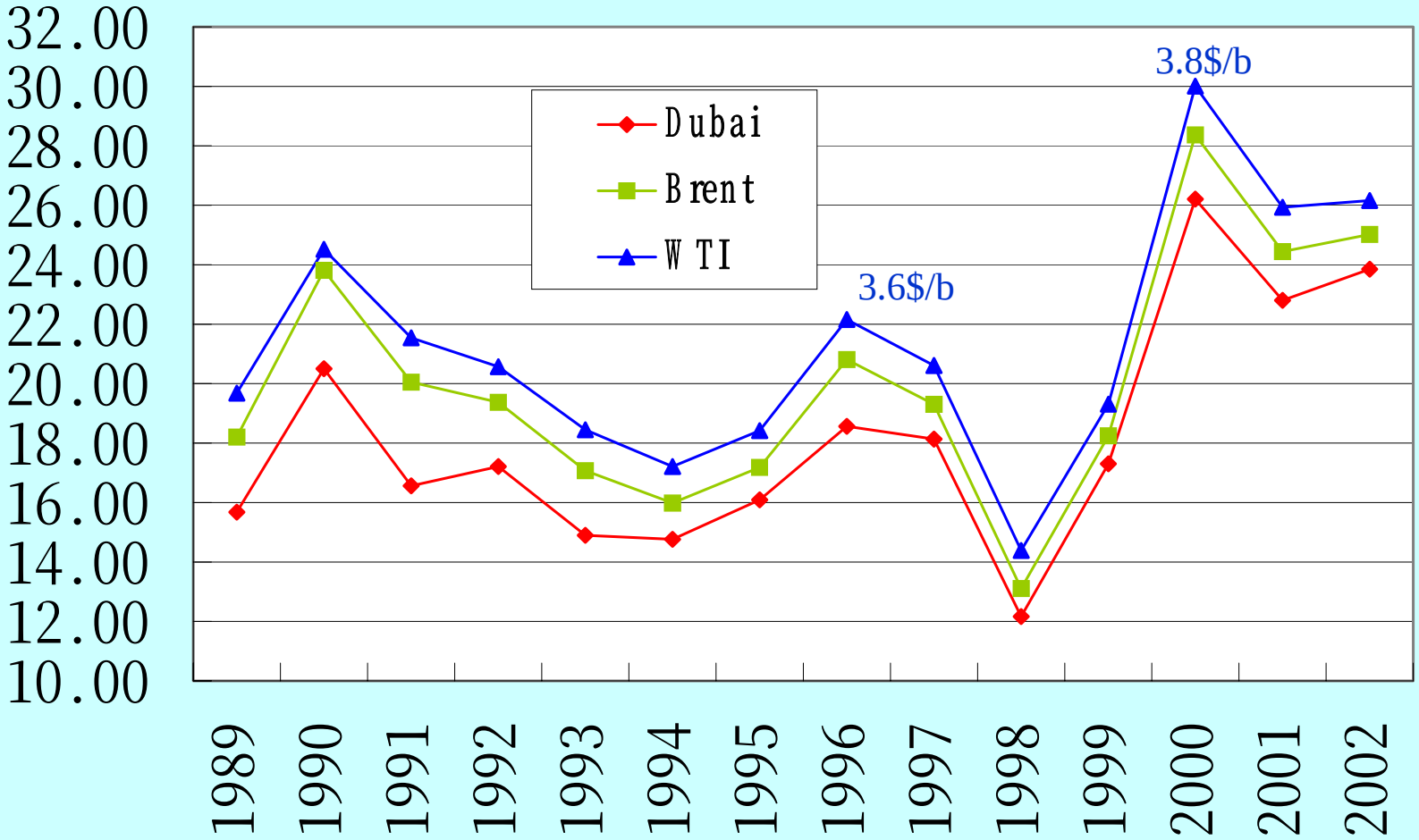
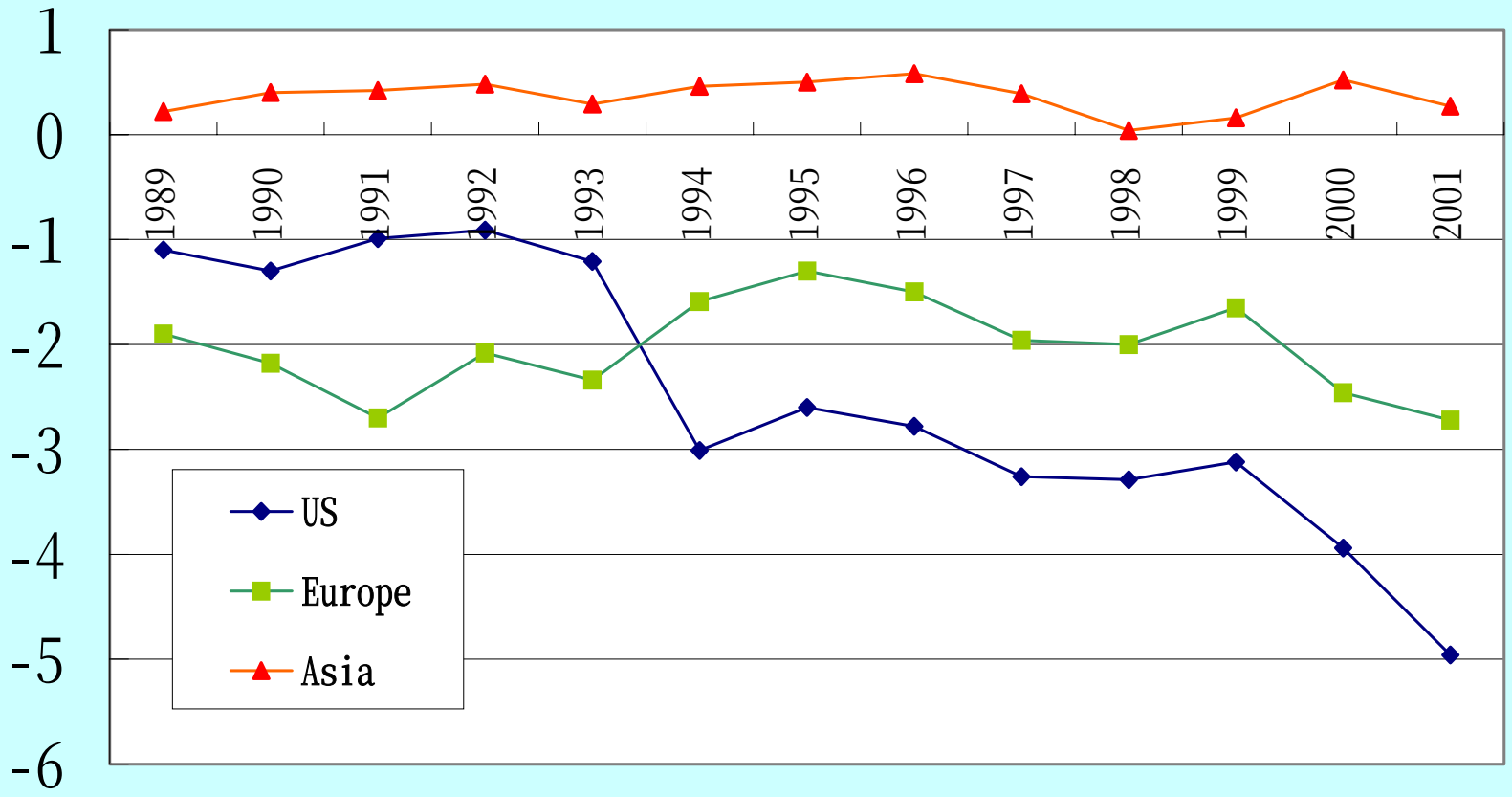


Figure 6: Annual Average AF (Premium or Discount) of ALC to US, Europe and Asia, 1989-2001 ($/b)



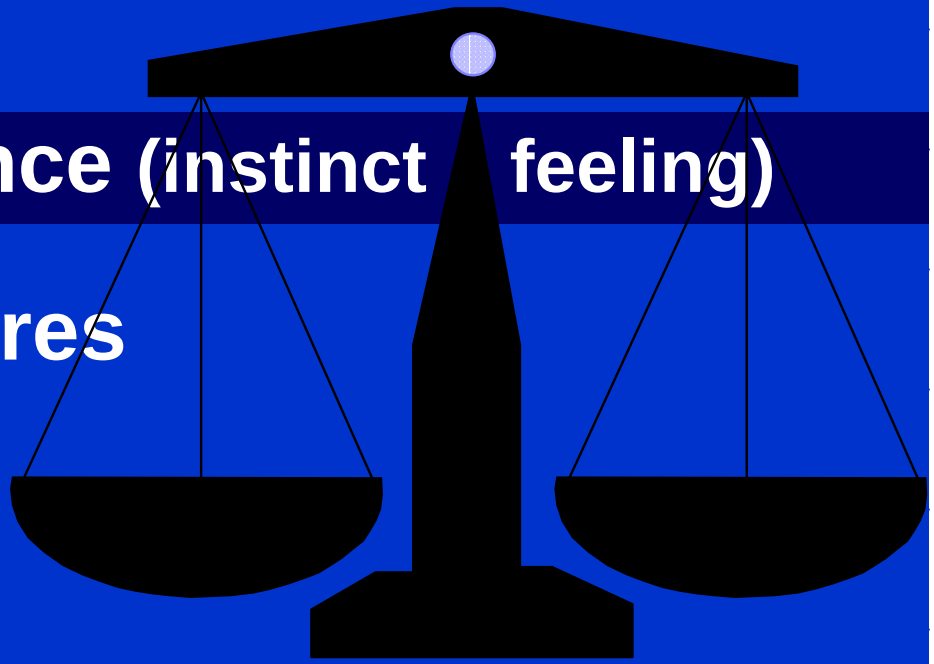
Outline

I. Facts of Existence

II. Causes for Existence (instinct feeling)

III. Options for Measures

IV. Conclusion



II. Causes for Existence of Asian Premium

- MidEast Producing Countries
  - Intention to sell at higher prices
  - Problems of Marker and AF
- Asian Consuming Countries
  - No Local Marker Crude
  - Great Reliance on ME Crude
- USA: Greater influence in ME
- Supply Stability at Expense of Premium

Middle East Producing Countries 1

- Fundamental reason: History form “ Netback Value” to present “ 22-28 $/b Price Band” tells us they want to sell oil at good price.

  - 1986, Netback Pricing in consideration of refining margin, great losses
  - 1987, formula with 3 different indices is adopted
  - 1991-92,Saudis, followed Kuwaitis, uplifted formula to Asia
  - 1994, Marker to US changed from ANS to WTI
  - 1996, almost similar formula due to price hike and enlarged marker differential (3.6$/b)
  - 2000, same as 1996 (3.8$/b)
  - 2000-now, price band mechanism

OPEC succeeded in recovering its lost territory in world oil price setting while manipulating price to East Asia

Middle East Producing Countries 2

- Primary reason: Dubai lost its validity as a marker crude
  - Rapid Decrease in Production :

    430,000 in 1987- 150,000 in 2002- 100,000 in near future
  - Limited Spot Trade with Fierce Bidding
  - 2nd Hand Marker instead of an Independent Marker:

    Eyeing on Brent and Spread between Brent and Dubai

Middle East Producing Countries 3

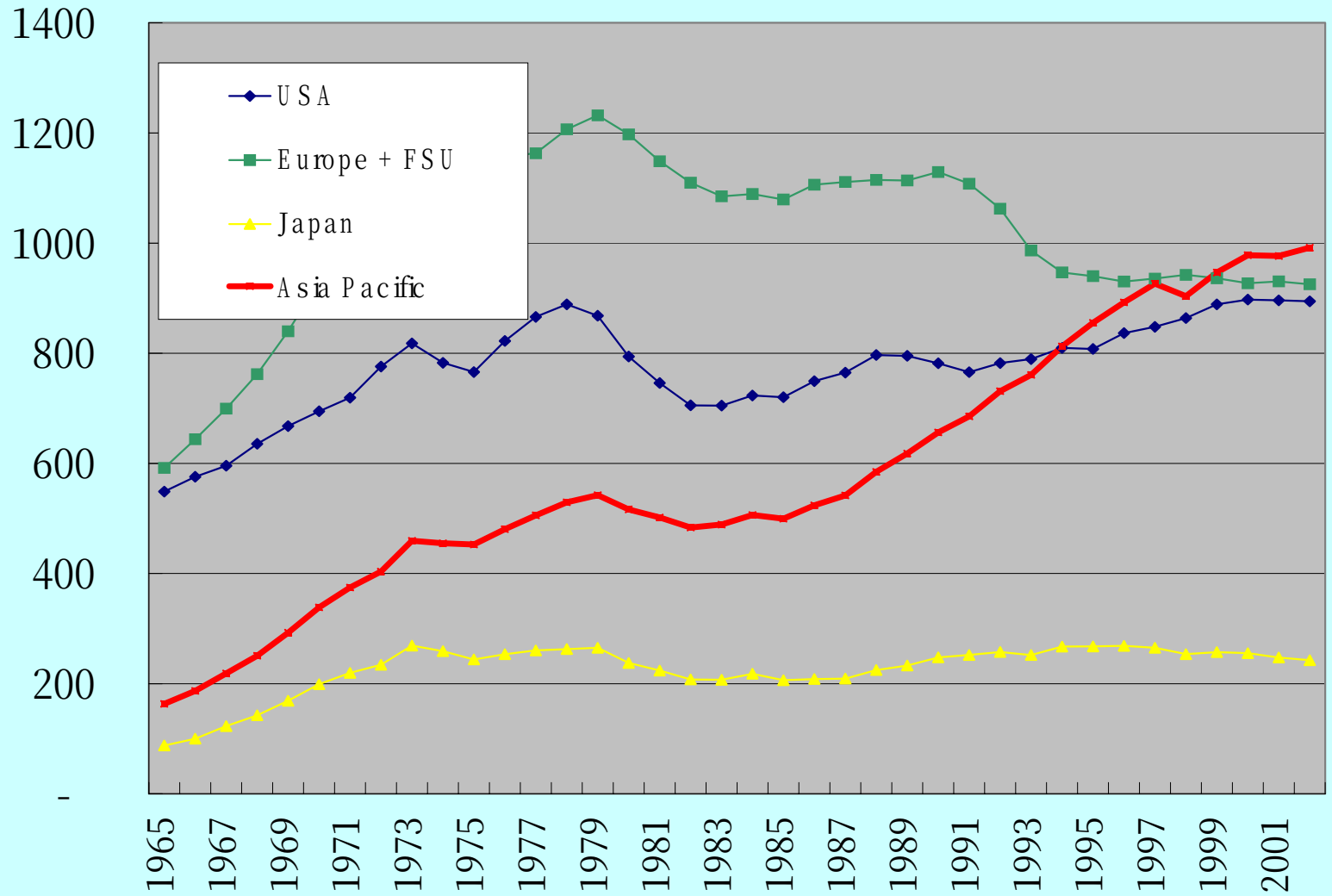
- Failure to adjust AF timely
  - Figure 5 indicates that the spot price differential tends to be narrowed.
  - Under the condition of price differential narrows, AF should be minimized for the sake of fairness
  - However, Dubai is only destined to Asian market and the only factor to be considered is freight cost

Thus, premium always exists due to no change of AF

Asian Consuming Countries 1

- No Local Marker Crude
  - US-WTI
  - Europe- Brent
  - Asia-Dubai
- Why?
  - NO generally recognized local spot Market
  - NO well-developed futures market

Asian Consuming Countries 2 :
Figure7 Regional Oil Consumption (MT/Y)



Asian Consuming Countries 2:
Oil Reliance on Middle East in 2002

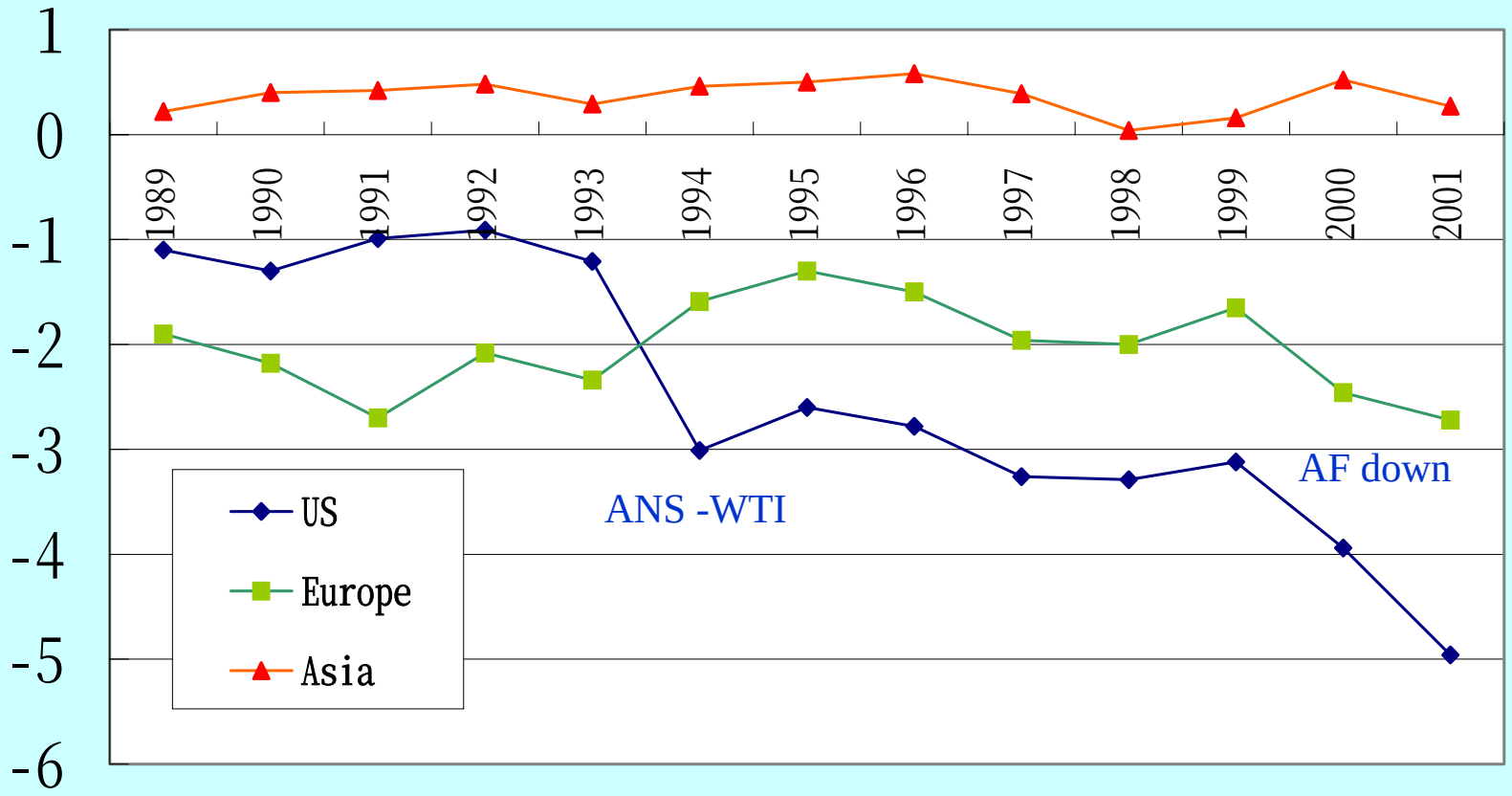
	USA	Europe	Asia Total	**Total Export**
From ME (Million Ton)	114.7	161.1	588.4	**895.0**
Total Import (Million Ton)	**561.0**	**587.4**	805.9	**2152.6**
ME/Total Import(%)	20.45	27.43	73.01	
ME/Total Export(%)	12.82	17.99	65.74	41.58

Source: BP, June 2003

USA: Greater influence in Middle East

- Why Asian Premium is so outstanding is due to sharp contrast with lower formula price to USA, which is characterized by a downward AF, discount instead of upward AF, premium
- Since Gulf War in 1990, a gradual and distinct downward adjustment has been made to formula price for USA while the downward adjustment for Europe is not so obvious and AF for Asia is stable
- The above AF trends indicates US influence in Mideast is greater than before
- Japan and Korea's role in engineering and construction market in Saudi and Kuwait has been replaced a lot by USA

Figure 6: Annual Average AF (Premium or Discount) of ALC to US, Europe and Asia, 1989-2001 ($/b)



Supply Stability at Expense of Premium

- Indeed several billion USD of annual extra pay due to Asian Premium. That is only one side of the story?
- We Asian consumers buy supply stability: Extra pay for extra benefit. But the benefit is only limited to supply stability.

  OPEC supply reduction to refineries in 1H this year (Reuters)
  - 25% for USA
  - 20% for Europe
  - 5% for Asia
- Asia is the final victim of so called " supply stability" because Saudis can further upsurge oil price only by reducing supply to USA and Europe. As a result, we Asians have to pay more due to price hike

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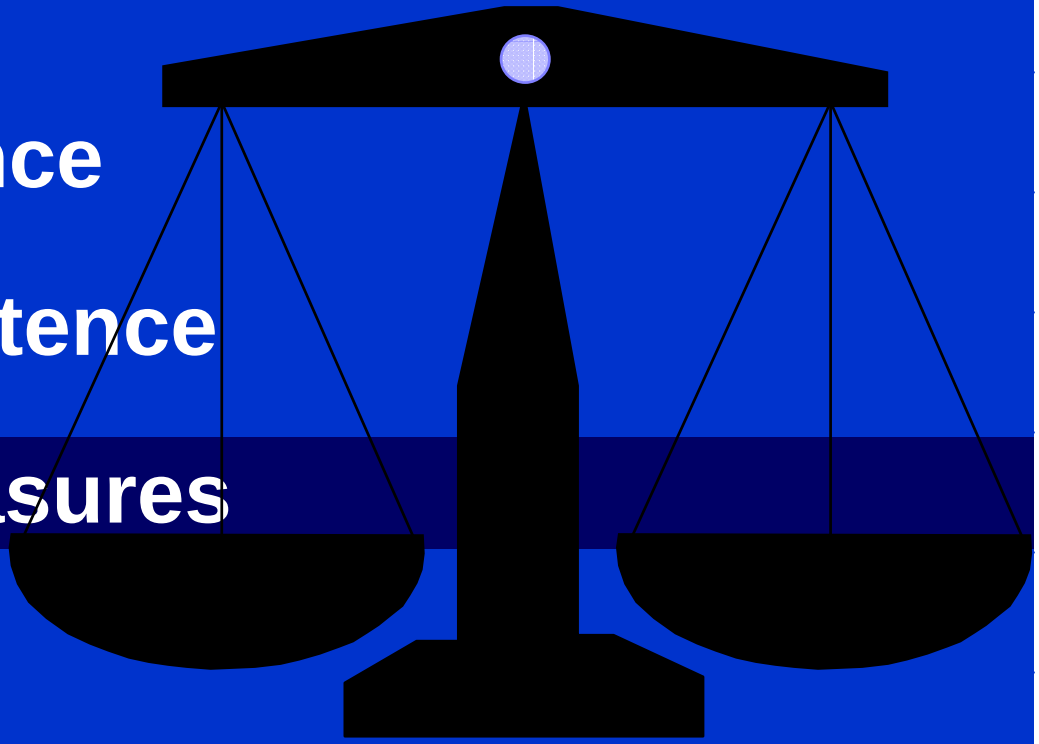


III. Options for Measures

Revolutionary Option:

To Set up a Completely New Mechanism

Idealistic and too Romantic

Evolutionary Option:

To Reform the Existing Formula

P(Formula price)=MP+AF

Marker Crude

Adjustment Factor

Proposal 1: To Change Marker Crude

Criteria for Alternative Marker from Lessons :

- Production Stability:

  It should be produced stably in significant volume

- Trading Liquidity:

  It should be traded in considerable amount in spot market

- Similarity in Property:

  It should be representative of all the crude available to buyers in terms of gravity and sulfur content

Either too small supply or too much demand of a crude shall leads to higher prices

Crude Oil Streams Ranked By Volume (1000b/d)

Rank	Volume	Crude Stream	Country
1	5000	Arab Light	Saudi Arabia
2	2400	Kuwait	Kuwait
3	1900	Maya	Mexico
4	1800	Basrah Light	Iraq
5	1300	Murban	Abu Dhabi
6	1300	Arab Extra Light	Saudi Arabia
7	1100	Daqing	China
8	1000	Urals	Russia
9	950	Alskan NS	US
10	900-1000	Iran Heavy	Iran

Source: EI

Options of Marker Crude By Volume (1000b/d)

Rank	Volume	Crude Stream	Gravity (API	Sulfur	Country	Destination
1	5000	Arab Light	34	1.78	Saudi Arabia	World Wide
7	1100	Daqing	32.3	0.11	China	China, Japan
12	900	Oman	33.3	1.06	Oman	NEA, India
22	500	Arab Medium	31.8	2.45	Saudi Arabia	World wide
29	425	Brent blend	38.3	0.37	UK	Europe, IPE
38	365	WTI	39.6	0.24	US	US, NYMEX
56	250	Zakum	39.2	1.1	Abu Dhabi	Japan
73-83	190-150	Dubai	31	2.04	Dubai	NEA, Thai, India
101-70	112-200	Al Shaheen	30	2.15	Qatar	Korea

Source: EI

Feasibility Analysis on Optional Markers

Arab Light (ALC) & Arab Medium (AMC):

- No.1 and No. 22 production scale; global traded
- ALC, OPEC marker before 1986
- but spot trading banned
- Market Monopoly and manipulation by Saudis

Daqing:

- No.7 production scale and most hopeful alternative locally
- Regulated in host market and limited in spot market
- Priced upon Minas
- Declining production trend means less export
- Property different from ME crude (sulfur content)

Feasibility Analysis on Optional Markers

Oman:

- No.12 production scale
- Spot trading larger and more active than Dubai
- Being adopted as a marker by an average factor in formula price
- Worry of price manipulation by Shell with 34-40% concession interest with OPD

Brent:

- No.29 production scale (but with declining trend)
- Price index to so many crude and a marker to crude for Europe
- Active but too much trading both in spot and futures market
- Reflection of supply and demand only in European market

Feasibility Analysis on Optional Markers

WTI:

- No.38 production scale
- Global leading price index due to role of NYMEX
- Too frequent price fluctuation due to unavoidable artificial manipulation by noncommercial traders
- No spot traded internationally due to US export ban
- Different transportation system: Domestic pipeline vs VLCC

Feasibility Analysis on Optional Markers

Zakum:

- No.56 production scale
- Destination mainly to Japan

Al Shaheen:

- No.70 production scale
- Increasing production trend
- Interested mainly by Korea

Feasibility Analysis on Optional Markers

- No Perfect choice!

- We intend to choose Brent for the following naive reasons
  - Its generally acknowledged market position
  - Its high degree pricing transparency
  - Its moderate price level

(Actually, when I talk about world oil price , I tend to quote Brent as the representative)

III. Options for Measures

Proposal 2: To find a satisfied trading mix

Current oil market: Dominated by spot and futures but with various trading style co-exist:

Spot Contract, Futures Contract ,Barter Contract

Processing Contract, Joint processing and Operation Contract,

PSC Contract, Supply Contract to JV refinery

In order to mitigate price risks:

- To choose different combination of oil trading styles according to different market features at different time (hedging by Chinaoil)
- To expand oversea exploration and Production (3 bigs in CHINA)
- To set up JV refineries (STARs, SINOPEC)

III. Options for Measures

Proposal 3: To Diversify Oil Imports

- To reduce oil reliance on certain crude from certain region

  That is what we NEAsians are doing now even if there are so fierce competitions internally and externally.

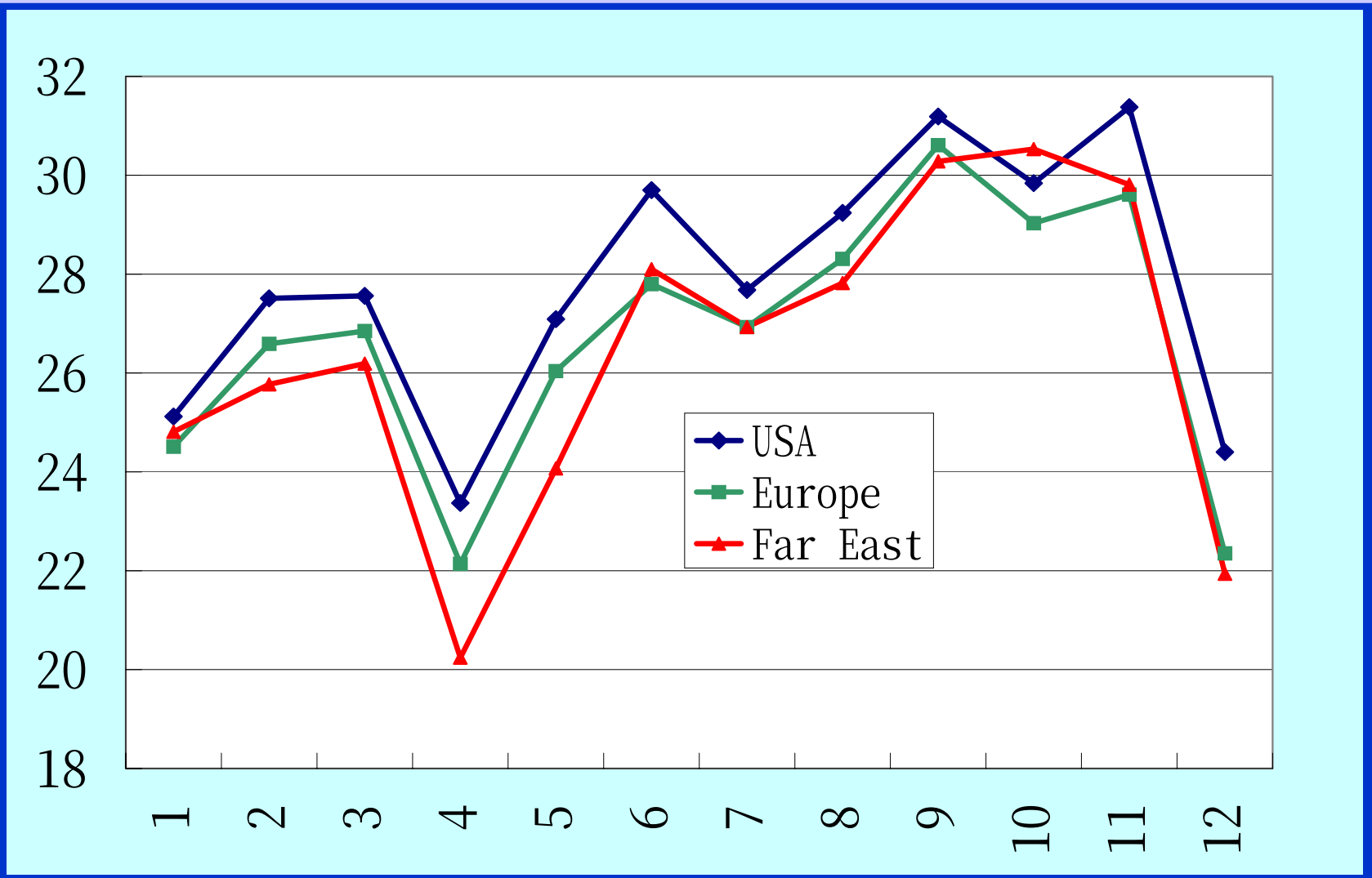
  Angola- largest oil import source of CHINA in July

  Russia- A potential provider to NEA

- To choose crude that is priced favorably to Asia

  Our study finds that there exists “ US Premium”. i.e. there are some crude oil sold to Asia is priced lower than that to USA. Isthmus from Mexico is such an example

Figure 9: Monthly Exporting Prices of Mexican Isthmus(34API), 2000 ($/b)



Isthmus Crude

- Production Declining: 713,000 b/d
- Export volume:100,000 b/d
- Priced at term contract basis
- Separate price formula for US, Europe and Asia
- Benchmark: for US, not WTI;

  for Asia, average Oman and Dubai
- Evaluation:

- Smart price, marker still the same but AF much better satisfied
- Less availability and stability due to limited export
- Be careful: Isthmus to Asia not not always lower priced and not all the crude from the same region are priced the same way.

Figure 10: Annual Exporting Prices of Mexican Isthmus(34API) ($/b)

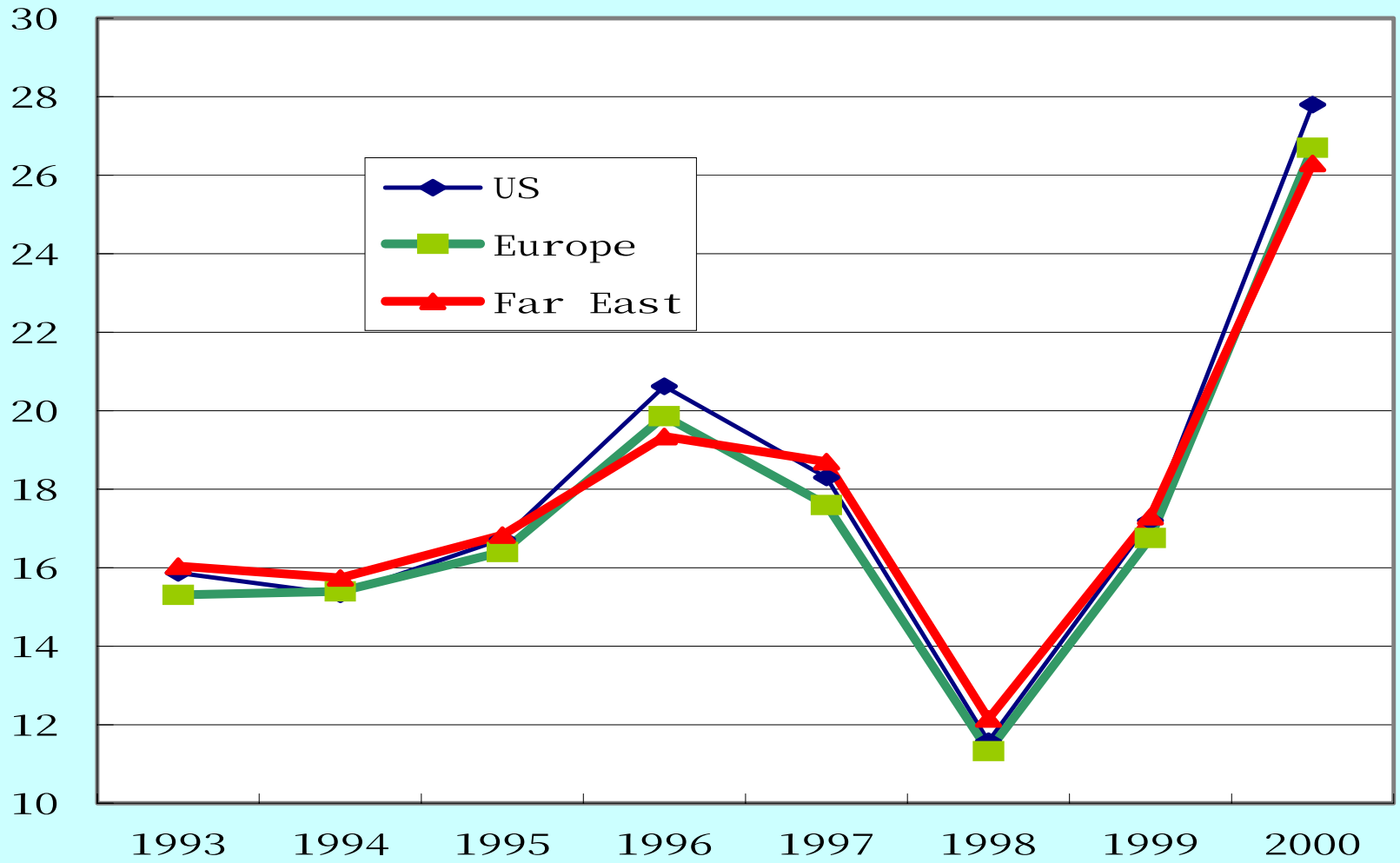
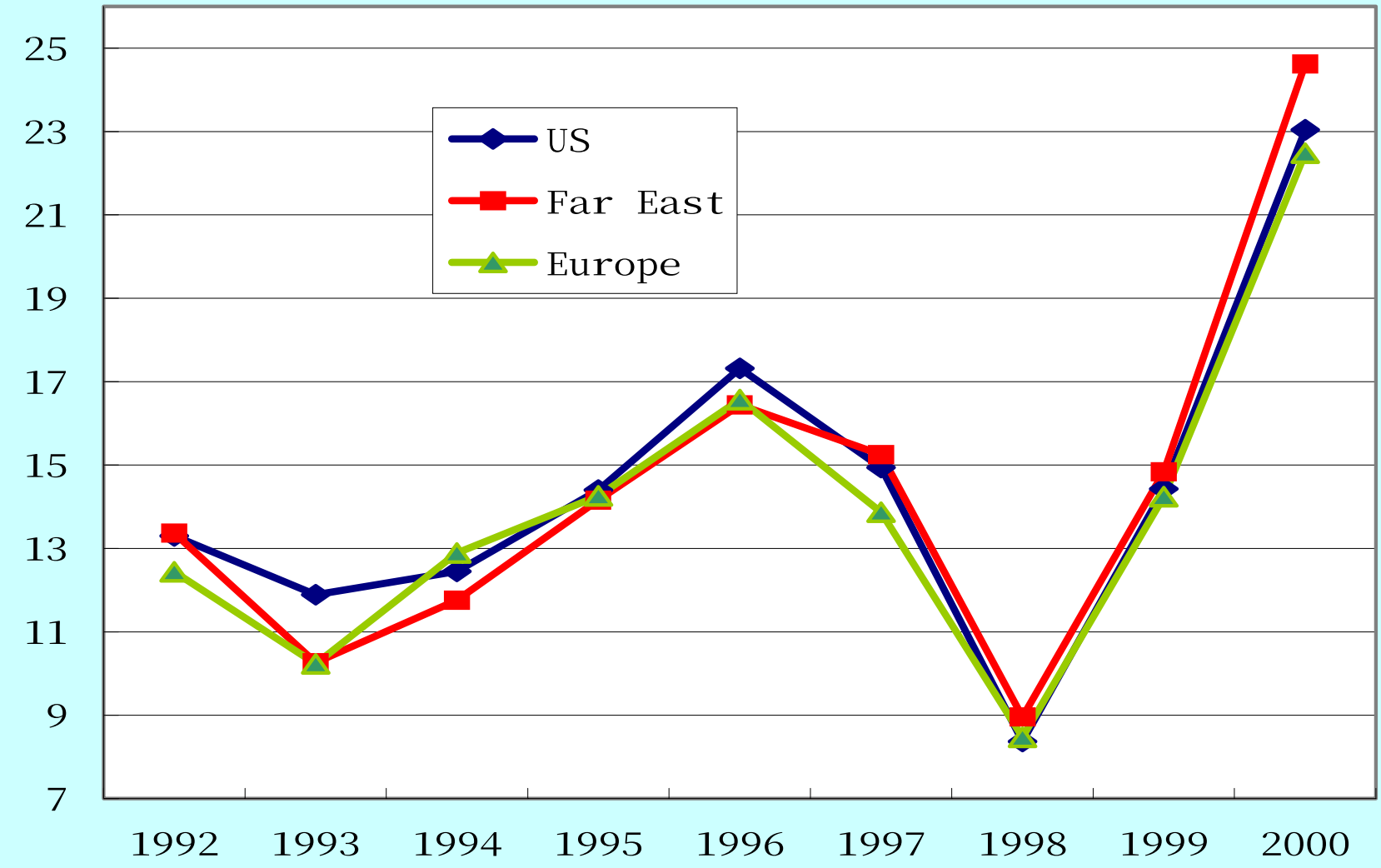


Figure 11: Annual Exporting Prices of Mexican Maya(27.7API), 1992-2000 ($/b)



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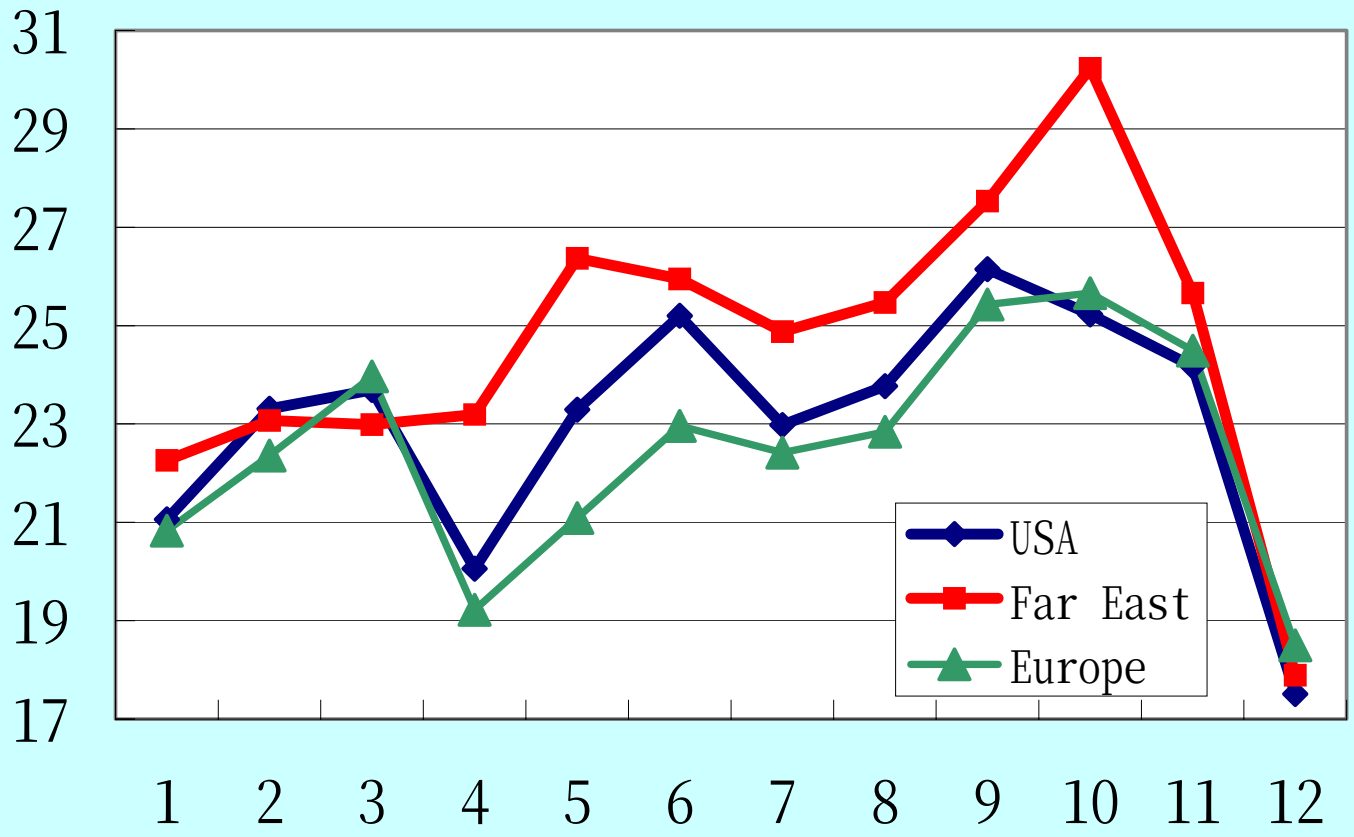

Proposal 4: To Strengthen Dialogue with Producing Countries

- AF, instead of Marker Crude, key and focus in negotiation of contract resigning.
- AF change can offset losses stem of marker crude
- Necessary to fully understand price indices and price trends of all the crudes, esp. Marker Crude
- Necessary to adopt sound negotiation tactics and kills
- Necessary to send our messages to Mideast producing countries for the purpose of mutual understanding

Proposal 5: To Strengthen Unity among Asian Consuming countries

- Step 1: To communicate among ourselves
  - Gov-Gov
  - Company-Company
  - Institute- Institute

- Step 2: To make some breakthroughs in concerted efforts
  - Strengthening physical energy market
  - Early establishing all-accepted regional futures market to foster a local marker crude

New Emerging Oil Market

Japan :

- Domestic market deregulated since 1996
- Stable demand (2.6mb/d) and import since 1990
- Soundly-developed futures market
- Surplus refining and inventory capacity

ROK:

- Increasing demand
- Increasing import
- Surplus refining and inventory capacity
- Center stage in NEA

China :

- Focus of Asian oil industry
- Major oil importer
- Demand/supply affects “Asian benchmark”
- Domestic market open by 2005
- Derivatives needed
- Shanghai or Dalian?

Singapore is the leading trading center

- Singapore's position as the leading refining center has eroded because of the increased refining capacity in China, India, ROK and Taiwan
- Evidence shows Singapore remains the main trading center and is the pricing center for the Asian petroleum industry
  - Established market with 100 years oil trading history
  - Role of swing refiner and entrepôt businessman
  - Logistics -Large capacity (16-mil bbl)of independent storage
  - Confidence- Political stability, Non-government intervention

Conclusion

- Asian Premium Reflects Mideast's Bias to Asia
- Asian Premium, a Constraint to Asia's Competitive Edge
- Game Rules to Be Changed
- It Is Really a Hard Job to Have " Winds of Change"
- " It All Depends on Human Efforts"(Chinese idiom)

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Gamsahamnida !

THANK YOU !!