

# U S "oildependence" in a global context

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IFR I, Paris 30 M ay 2002

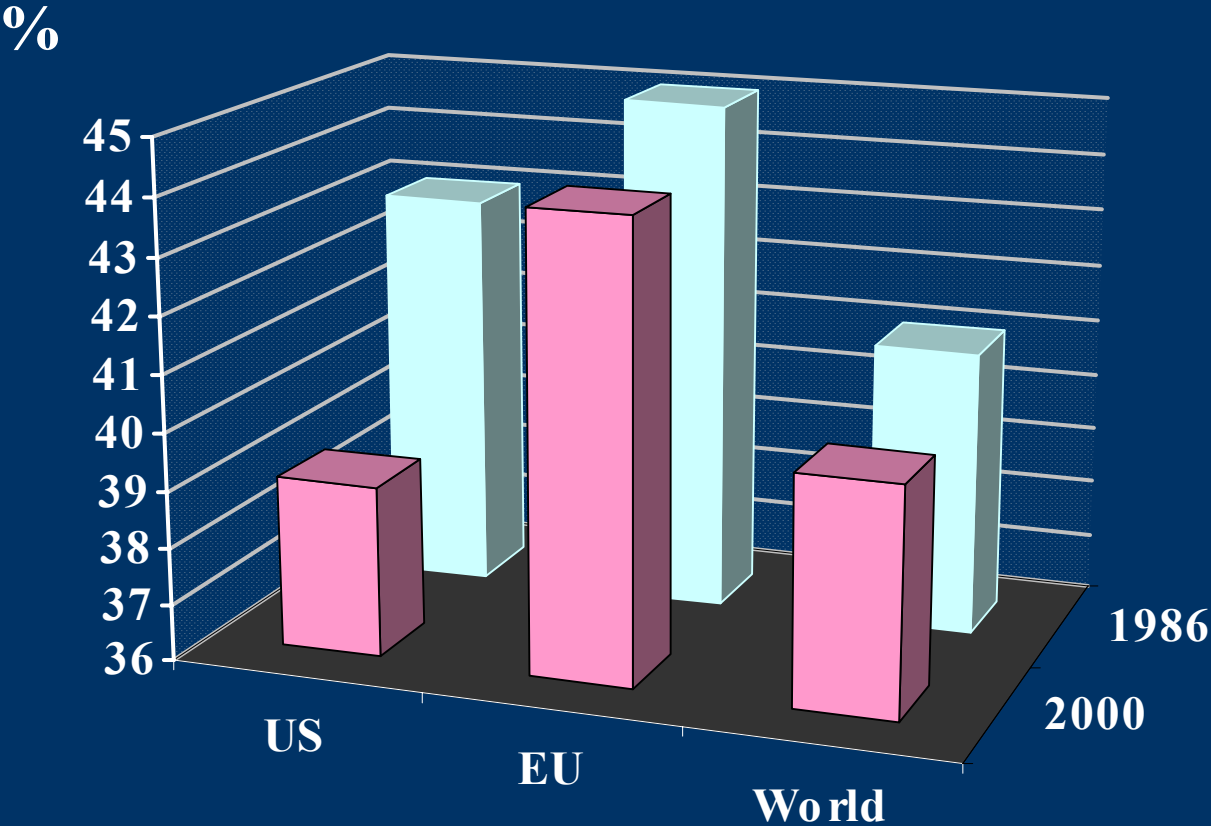
# Outline

- U S energy: m ore or less im portant?
- U ncertainties in w orld oil outlook
- S cenarios of risks and rem edies
- C onclusions: living w ith the U S

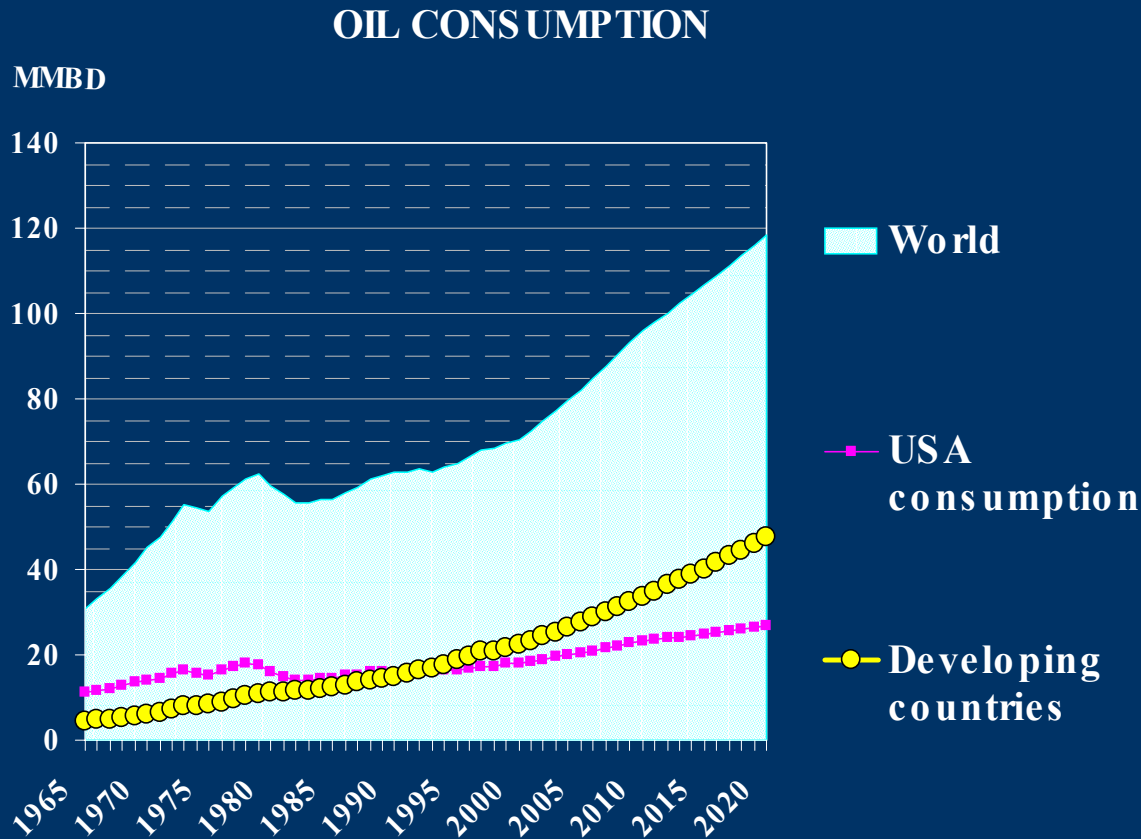
# U S in world energy

- U S energy use per capita in 2000  
*similar to 1973*
- U S energy use per \$ G D P  
*40% down on 1973*
- U S share of world energy use  
*down 5% to 26%*

# ENERGY DEPENDENCE ON OIL

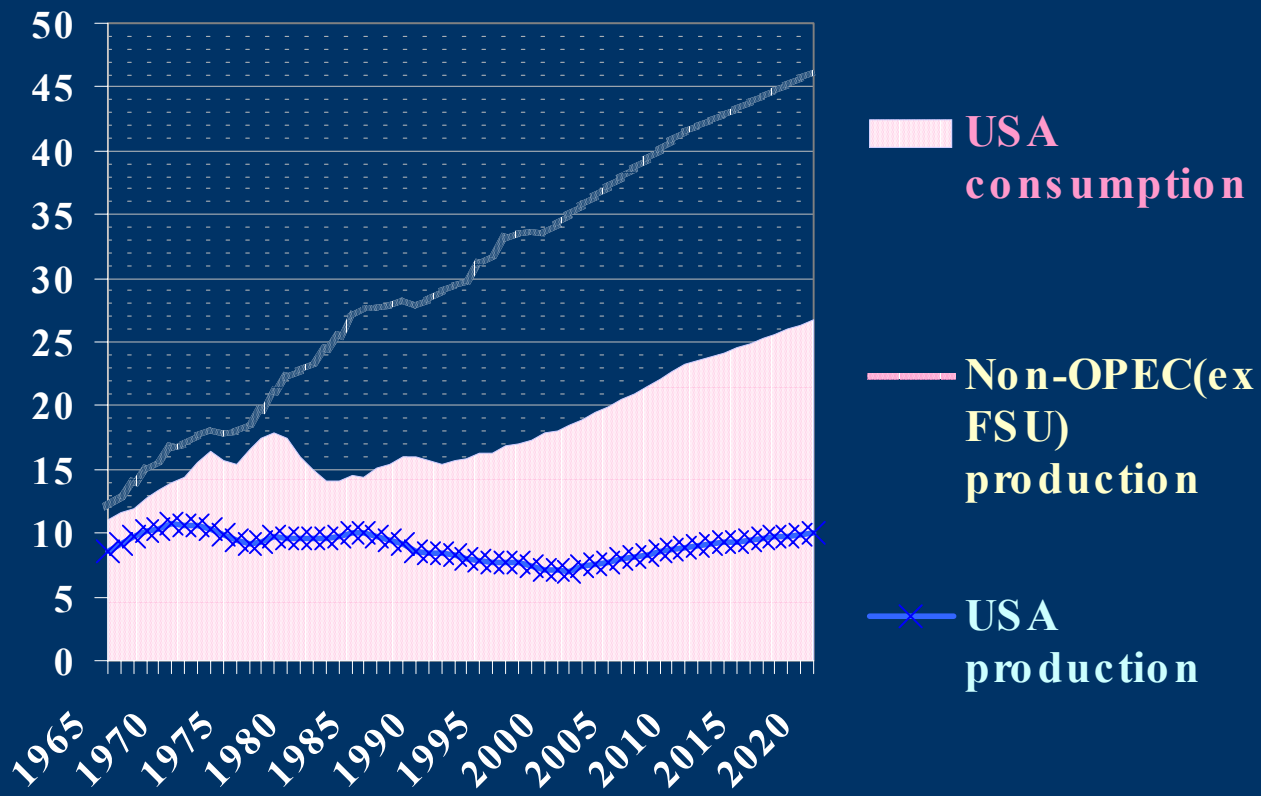


# US does not lead world oil consumption



# The problem is supply

MMBBL OIL PRODUCTION vs US CONSUMPTION



# Outlook for world oil

(IEA-DOE 2020)

- World energy/oil use grows = 60%
- Developing = developed countries'
- Gas gains market everywhere
- Nominal oil price increase
- Middle East share of oil supply grows from 27% to 33%
- Over 60% of oil will be traded

# Key uncertainties

- Growth of gas markets and trade
- Run-down of nuclear capacity
- Oil investment
  - OPEC: *will they "wait and see"?*
  - Developing countries: *will foreign investment be acceptable?*

# Trade is inevitable

Security is about managing the risks

- Embargoes
- Price shocks
- Cartel
- Investment delays

# Em bargoes

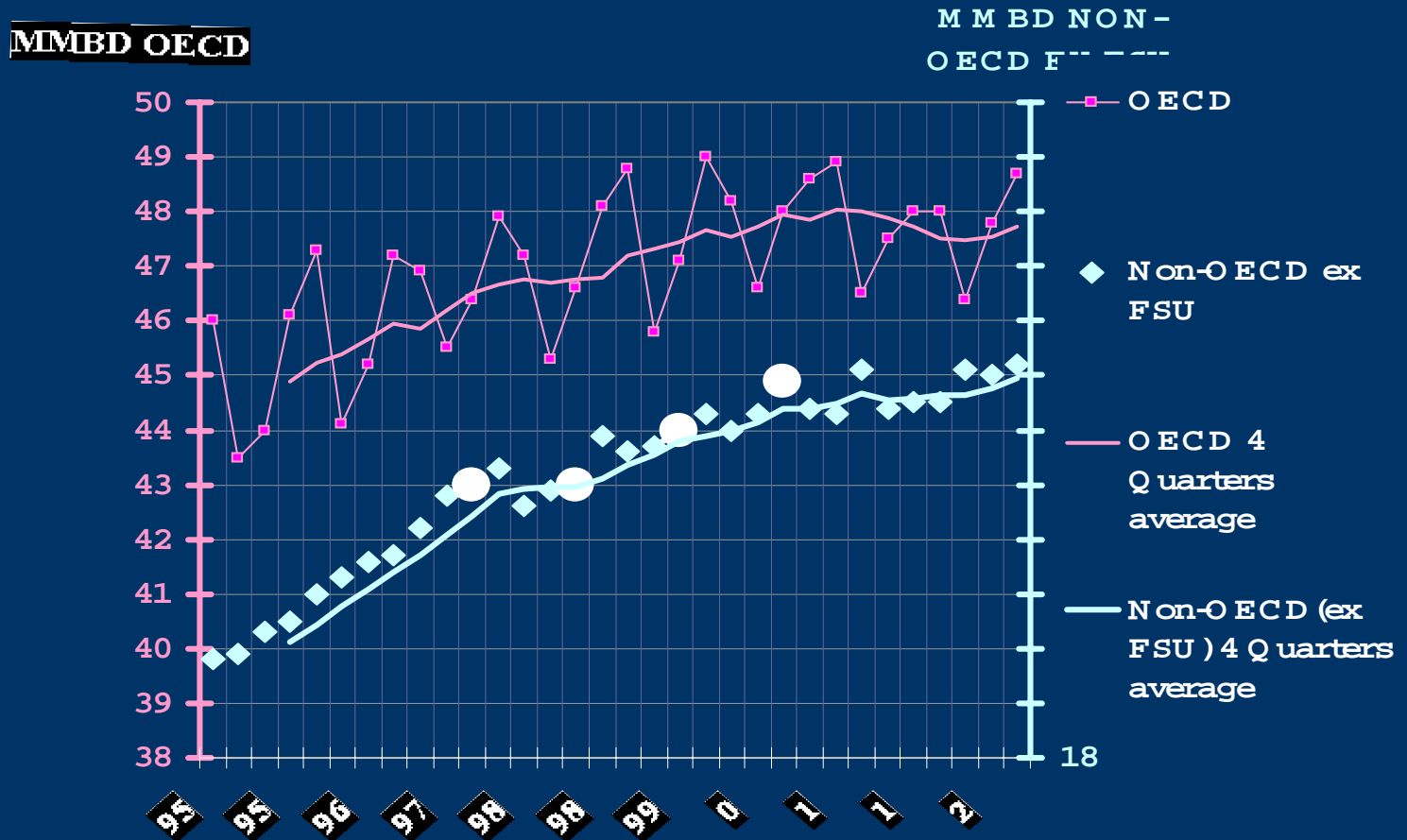
Since 1973 all em bargoes have been

- *against* oil exporters
- *Against* imports by "pariahs": North Korea, South Africa, Cuba

*Should the US worry?*

# Market disruptions

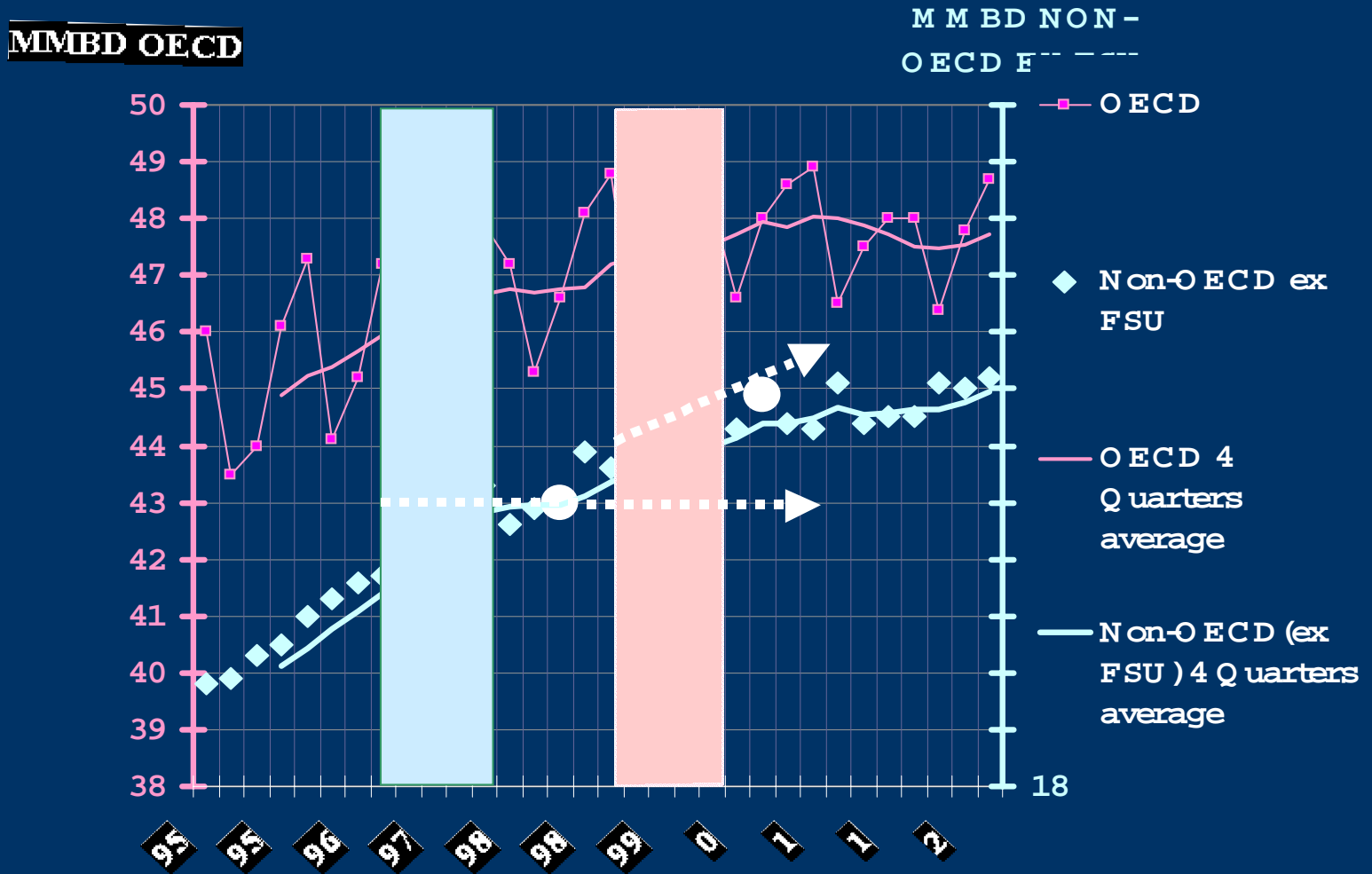
## QUARTERLY OIL DEMAND 1995-2002



Source: IEA Oil Market Report

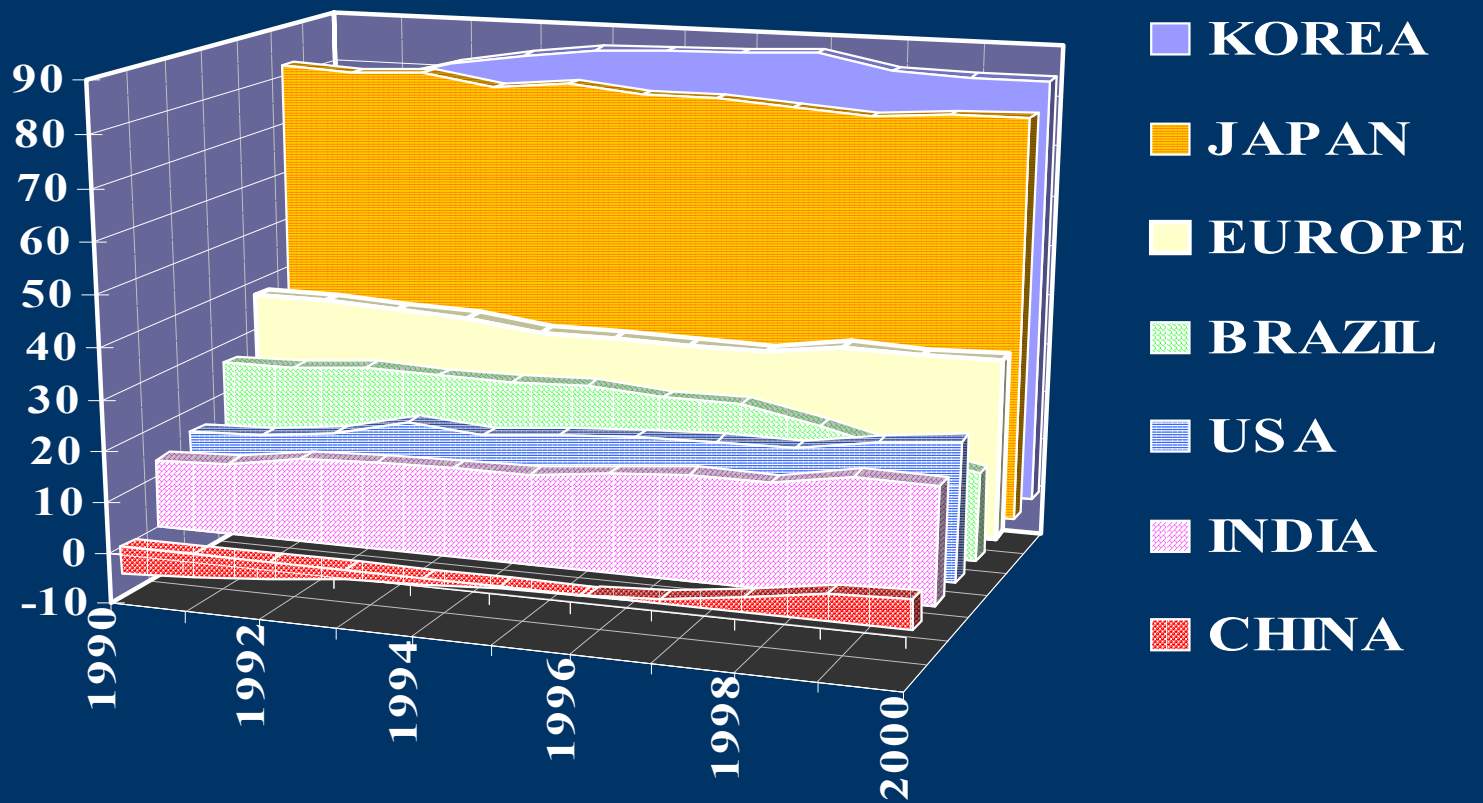
# Market disruptions

## QUARTERLY OIL DEMAND 1995-2002



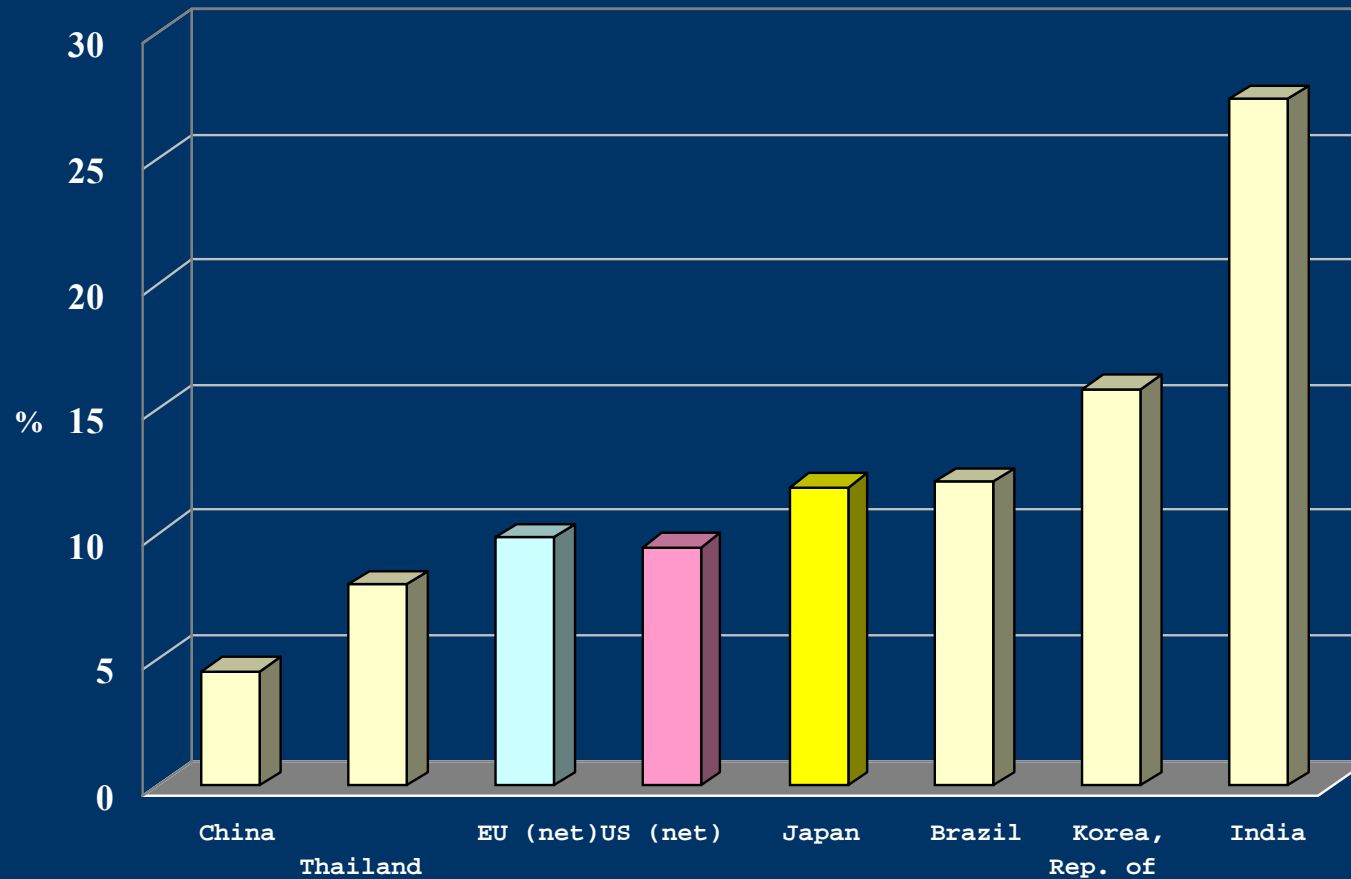
# Relative in port dependence

Energy imports % of consumption



# Economic dependence

Energy imports % of goods exports (1999)



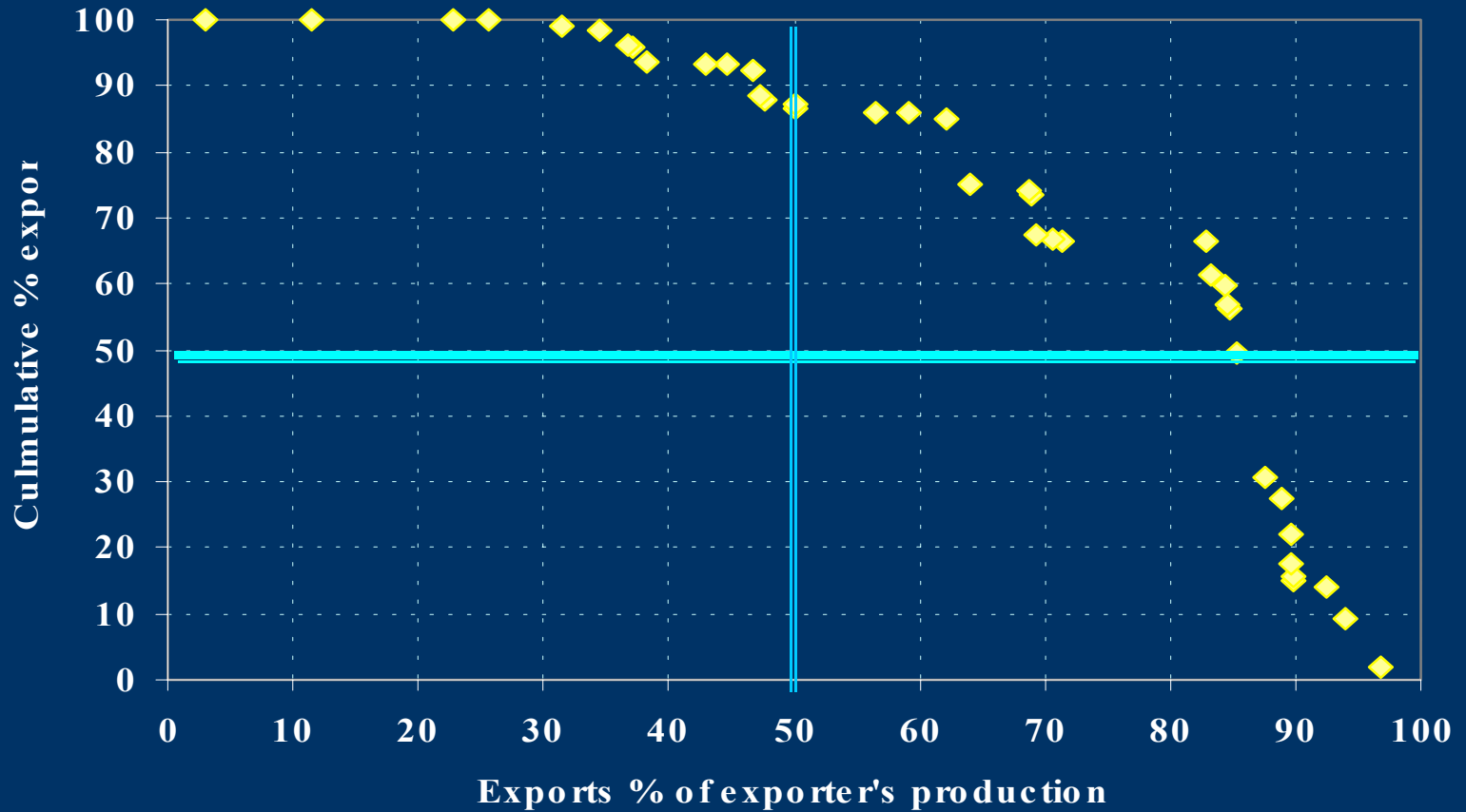
# Living with price swings

- Markets do not guarantee prices
- Intervention cannot control demand
- US/Europe not at disadvantage
- Strategic stocks for strategic supply problems

# Dem and measures are ambiguous

- Saving electricity does not save oil imports ( 3% of OECD electricity from oil)
- Saving transport fuel (if effective ) depresses oil price and *increases* OPEC market share

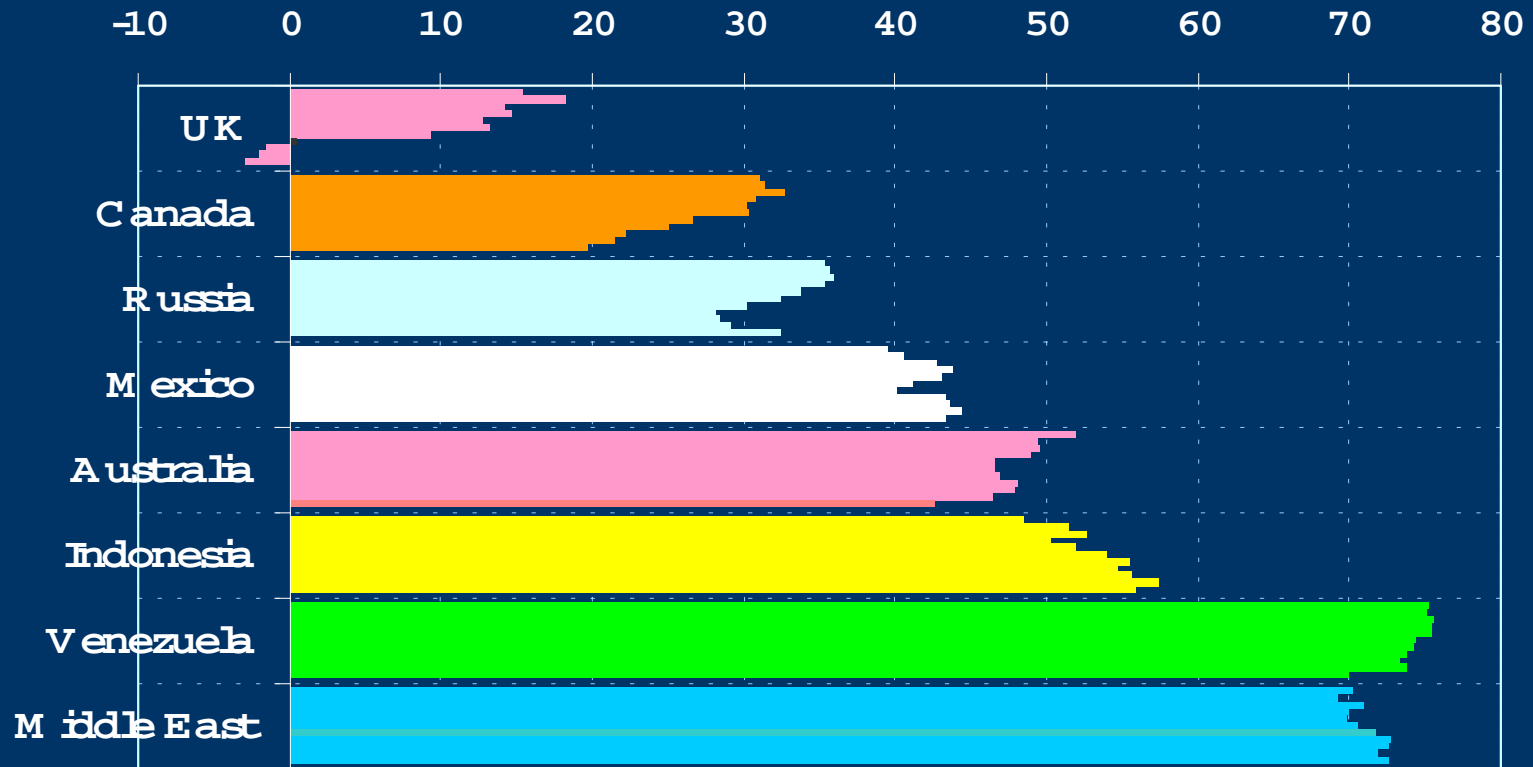
# Cartels - oil export dependence



Source: BP Statistical review

# Export dependence 1990-2000

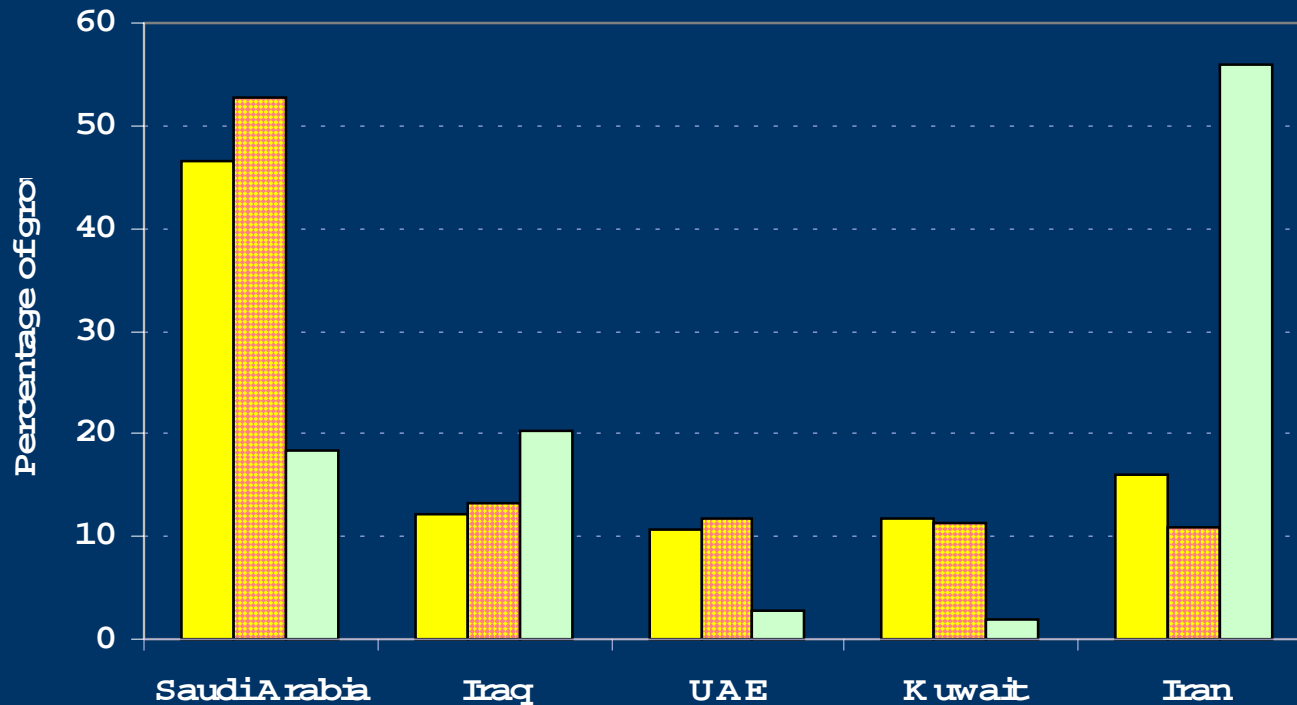
Exports % of energy production



Source: BP Stats. Review

# Competition in the Middle East

- Capacity 2000
- Oil Potential 2020 (EIA)
- Population 2000



Source:BP Statistical review(input basis)

World Bank, USGS/EIA

# Competition vs cartel

-Gas

-Non-OPEC:

-Within OPEC: West vs East

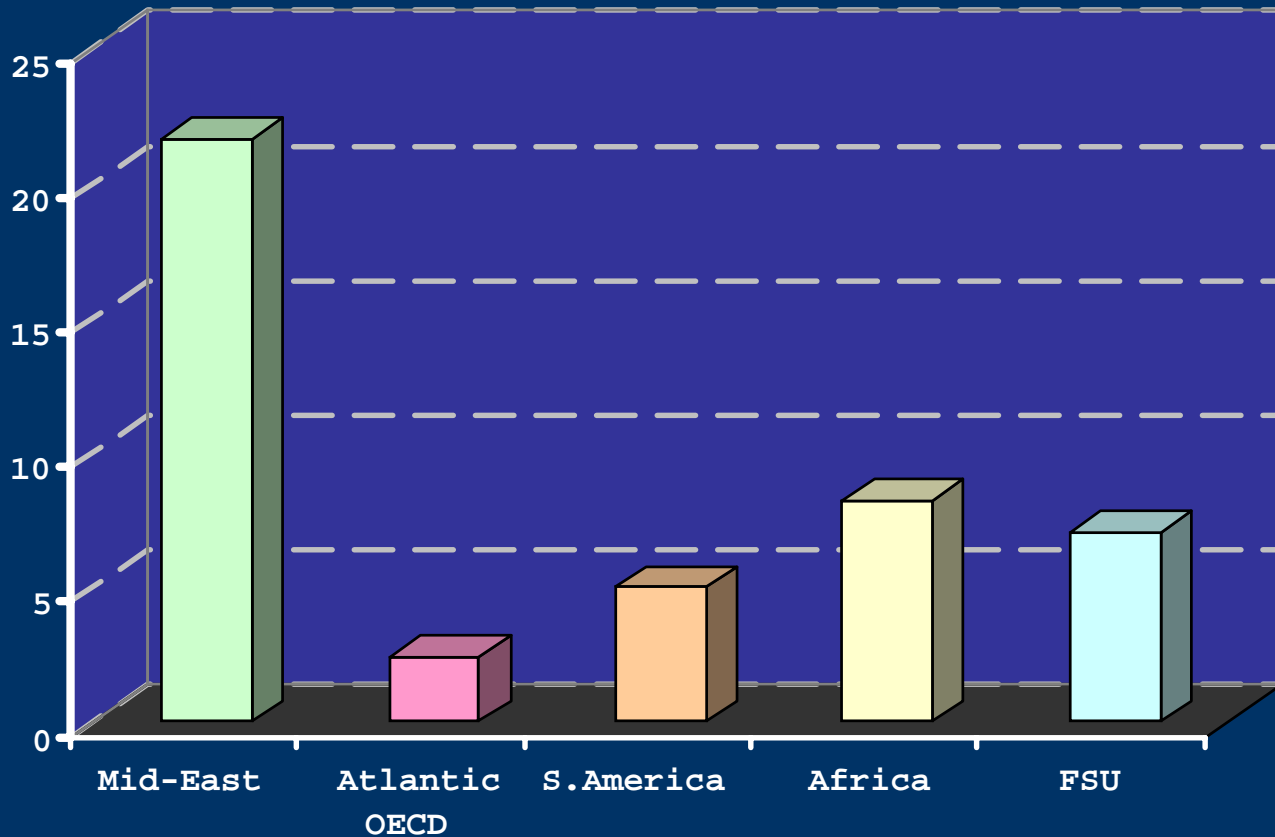
-Within Middle East

*Depends on markets and investment*

# Investment risks

## Increase in capacity 2000-2020

MMBD



Source IEO 2002

# Recent events

- Immediate uncertainty about Iraq
- Medium term : tension within one or more Islamic exporting country
- Long term : will key exporters remain committed to expansion and stability of international oil trade?

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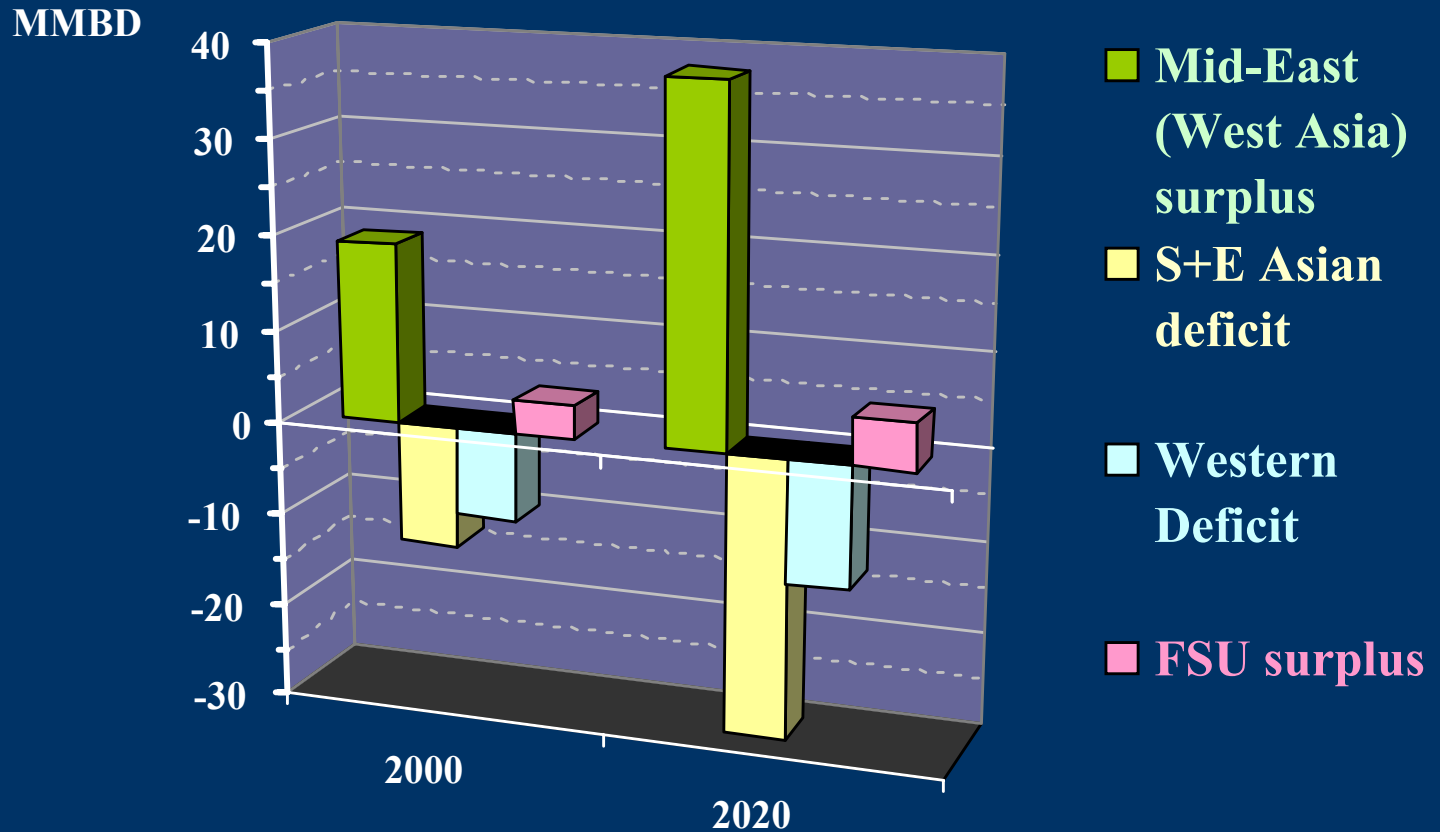
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# Fall-back: divide the world

## Regional oil balances



Source IEO 2002

# The fall-back policy ?

- In last resort, U S and Europe might "secure" oil supplies with minimal Middle-East imports
- Meanwhile, such a policy would create two markets: cheap for Asia, expensive for the rest
- Economic consequences unacceptable

# Conclusions

- International energy trade and investment provide cheapest security
- But global trade and investment policies need to
  - Expand markets
  - Accept foreign investment
  - Diversify infrastructure
  - Deal with export dependence