

The Role of the Middle East Producers in the Global Oil Market

presented to

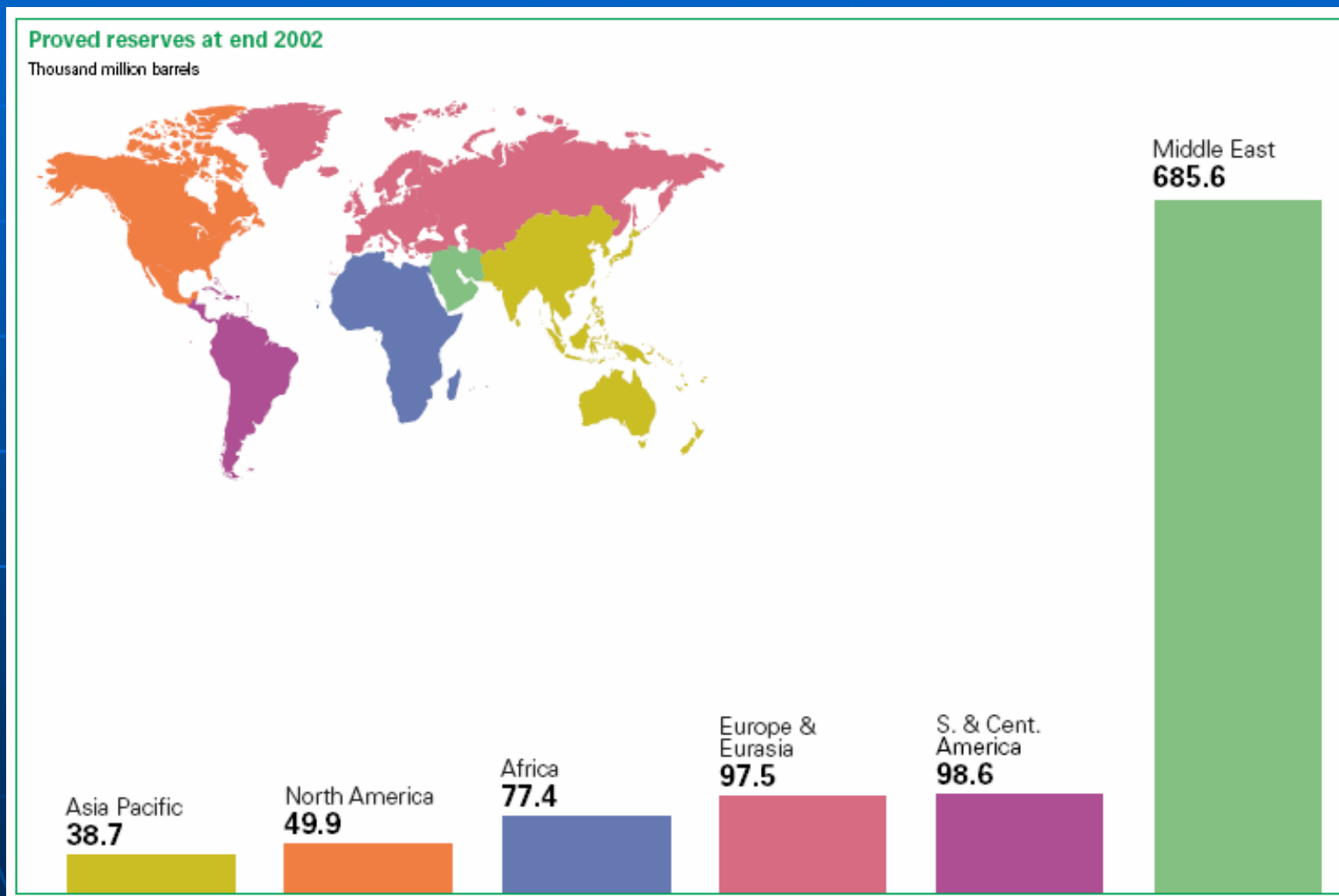
Focus: The Middle East
Executive and Professional Development Program
Center for Energy, Marine Transportation & Public Policy
New York, April 20, 2004

David Nissen
Director, Program in International Energy Management and Policy
Center for Energy, Marine Transportation, and Public Policy
SIPA, Columbia University, dn2022@columbia.edu

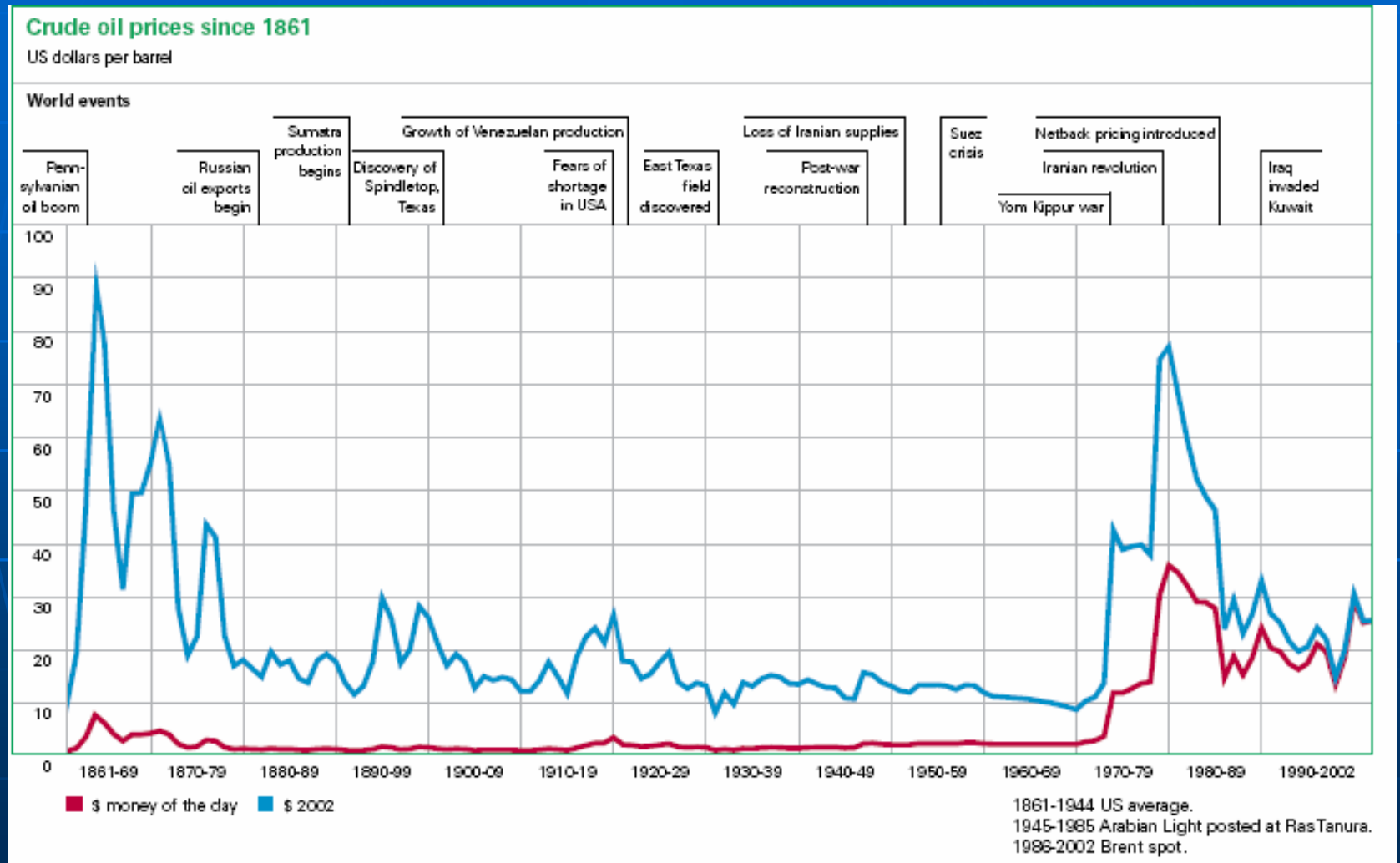
Agenda

- Evolution of the global oil market
- Future “dependence’ and the role of the Middle East
- Oil exporters’ economic development

Middle East oil reserves dominate



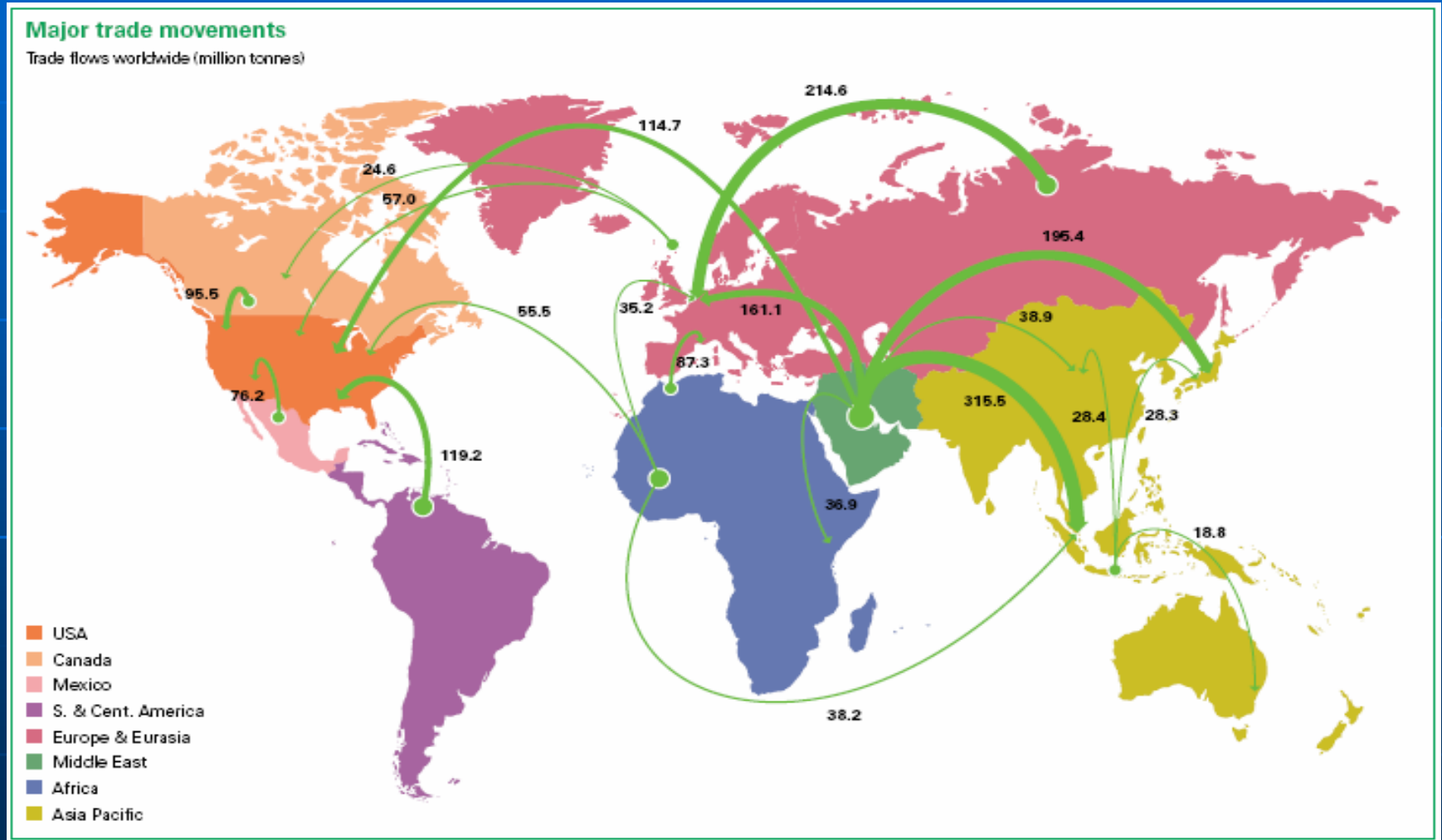
Post – 1973 is different



Crude oil reserves and production - 2002

	<i>Reserves</i>	<i>Production</i>	<i>Reserves</i>	<i>Production</i>
	<i>Gb</i>	<i>MB/d</i>	<i>Shares</i>	
Saudi Arabia	262	8	25%	12%
Iraq	113	2	11%	2%
United Arab Em	98	2	9%	2%
Kuwait	97	2	9%	2%
Iran	90	3	9%	5%
Qatar	15	1	1%	1%
Gulf OPEC	674	17	64%	24%
Venezuela	78	3	7%	4%
Libya	30	1	3%	2%
Nigeria	24	2	2%	3%
Algeria	9	2	1%	2%
Indonesia	5	1	0%	2%
Other OPEC	146	9	14%	13%
Russia	60	8	6%	11%
North America	37	10	4%	14%
China	18	3	2%	5%
Other FSU	18	2	2%	2%
North Sea	16	6	2%	8%
Mexico	13	3	1%	5%
ROW	66	13	6%	18%
Non-OPEC	229	44	22%	63%
		-		
World	1,048	71	100%	100%

Oil trade -- 2002

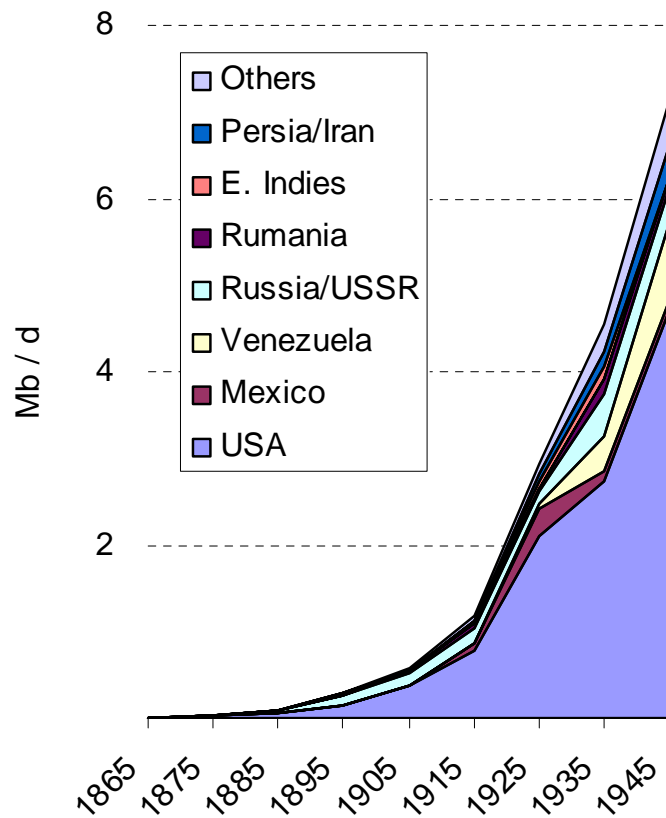


Most oil is found in big, cheap chunks

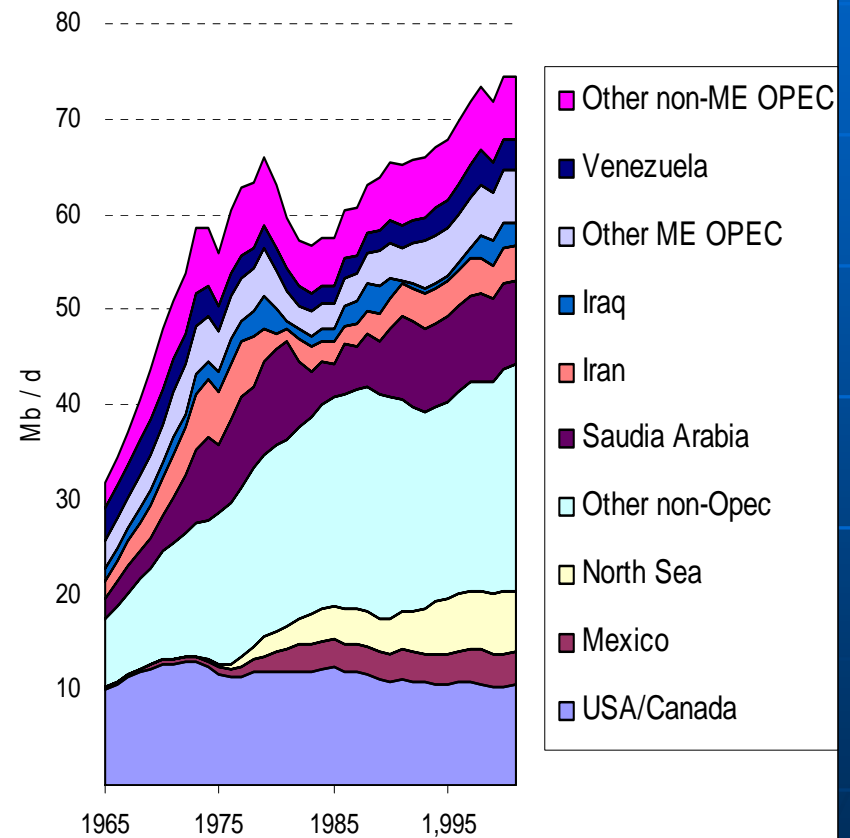
- Always an issues of market power -- tension between glut and monopoly control
- Trade dependence implies geopolitical significance

World Oil Supply

World Oil Production thru 1945

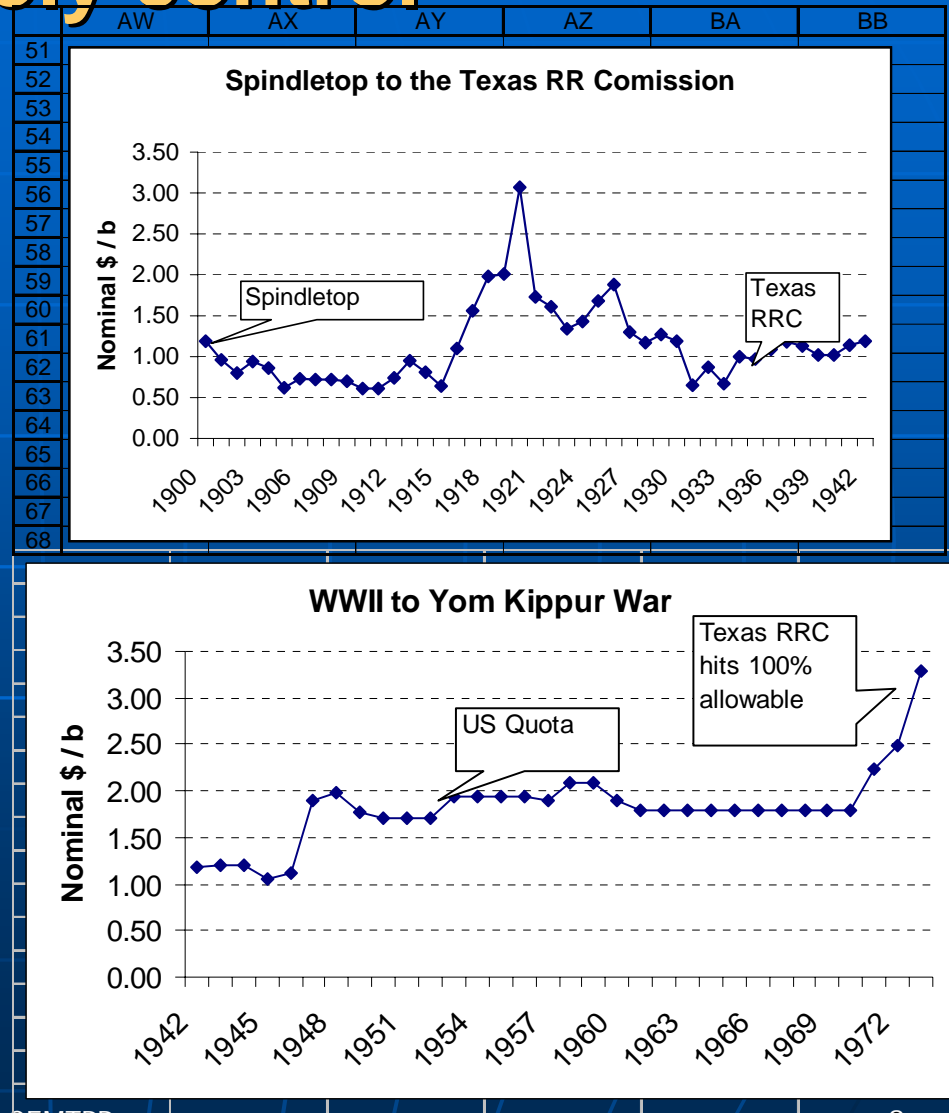


World Oil Production 1965-2001



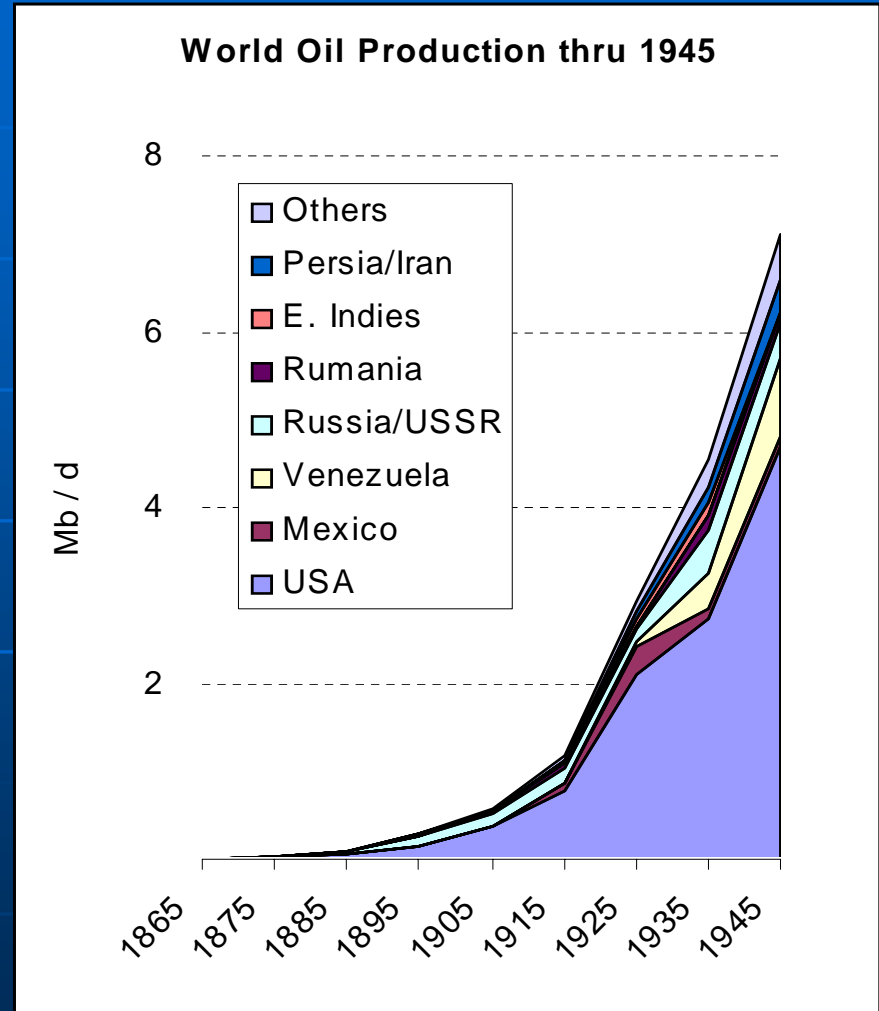
The oil market is almost always under monopoly control

- 1870 – 1911
Standard Oil
- 1911 – 1928
International co-operation/wars
- 1935 – 1971
Texas RR Commission, US Quotas
- 1971 – OPEC, more or less



1860 – 1945: US dominates, but Europeans “colonize” the rest of the world

- 1859 -- Oil discovered in Pennsylvania
- 1870 – Rockefeller forms Standard Oil
- 1873 -- Nobels enter Russia at Baku
- 1885 – Rothschilds enter Russia
Royal Dutch finds oil in Sumatra
- 1892 – S. Marcus send *Murex* thru Suez
- 1896 – Ford builds first car
- 1901 – concession in Persia,
Spindletop in USA
- 1907 – Shell and Royal Dutch combine
- 1908 – Anglo Persian formed
- 1911 – Standard Oil Trust dissolved
- 1914 – UK gets 51% of Anglo-Persian
- 1922 – oil discovered in Venezuela
- 1928 – (Gulbenkian) Turkish Petroleum
negotiate “Red Line” agreement
splitting ME (except Kuwait) between
French (CFP), BP, and Rd/Shell
Achnacarry “As is” agreement
- 1930 – East Texas fields come in in time
for recession
- 1935 – Texas Railroad Commission formed
- 1938 – Mexico nationalizes oil
- 1939 – 45 WWII, Japan grabs SE Asia oil
Hitler invades Russia to get Baku



1950 – 1975: Producers' power emerges

**1950 – US invited into Saudi Arabia,
Aramco is Standard, Texaco, Chevron, Mobil**

1952-55 Buyers' embargo of Iranian production

**1956 – Suez war, canal closed;
founding of independent tanker and FOB crude oil market**

**1959 –MidEast and Russian production grow,
US import quotas to sustain US price**

1960 – OPEC founded (Venezuela, Saudi Arabia, Iraq, Iran,

1967 – 6-day war, Suez closed again

1968/69 – North Slope and Alaska discovered

1970 – Libya raises price and share

1971 – Texas RR Commission “allowable” hits 100%

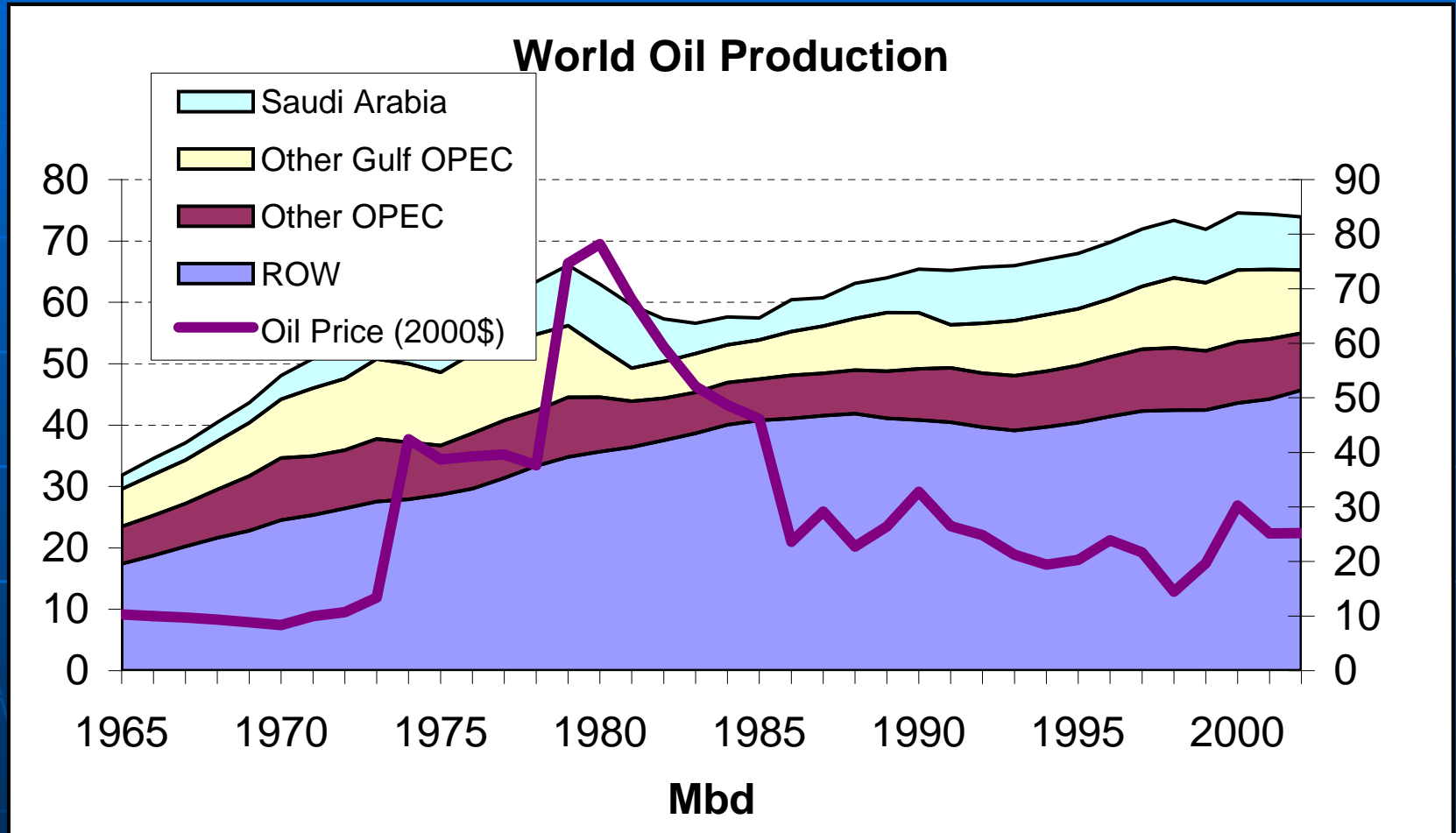
1973 – Yom Kipper war and embargo, oil price shock (\$3/b to \$11/b)

1975 – Concessions end in Saudi, Kuwait, and Venezuela

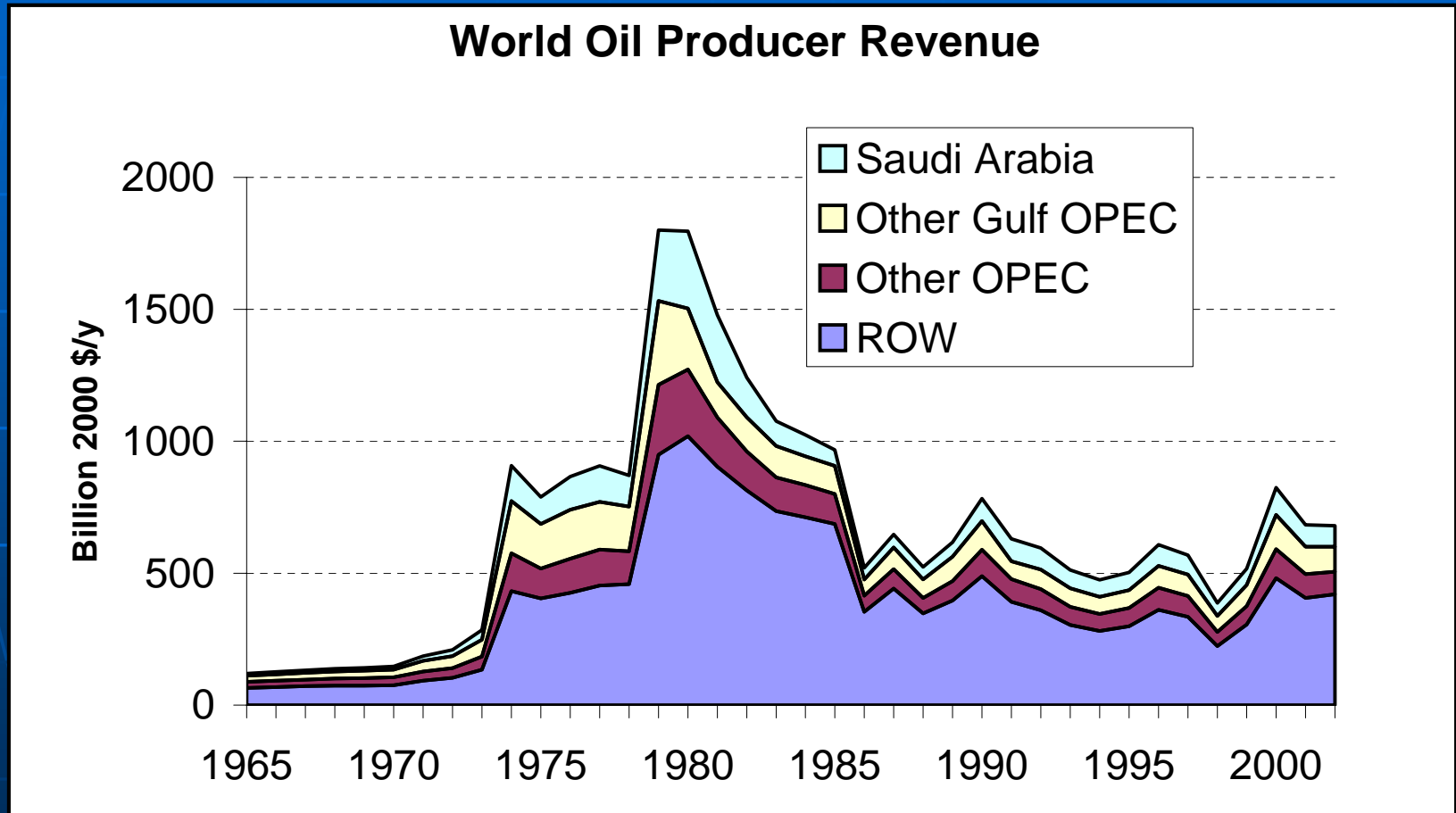
OPEC takes control and learns that greed is not rewarded

- 1973 – Yom Kipper war and embargo, oil price shock (\$3/b to \$11/b)
- 1975 – Concession end in Saudia, Kuwait, and Venezuela
- 1979 – Iran crisis, second oil price shock (\$13/b to \$34/b)
- 1981 – Saddam goes to war on Iran
- 1985 – Saudi (at about 3 Mb/d) sells “netback” oil
- 1986 – Oil price collapse to \$8/b, OPEC switches from controlling prices to allocating quantities
- 1991 – Kuwait price spike broken by SPR release
- 1998 – “Asian flu” causes \$10/b glut
- 2001 – OPEC discipline - \$22 - \$28/b
- 2003/4 – no Iraq-war spike, but prices stays in mid-\$30s

OPEC and Oil Pricing



OPEC and Oil Revenue



Lessons

- Producers' pricing power is limited by the response of demand and competing supply
- Saudi Arabia has been the stabilizing force after 1973

Projections of oil market dependence

- Volume
- Inter-regional trade and dependency

Projected regional trade grows by 26 Mb/d to 50%

■ Imports

- Industrial regions grow 15 Mb/d
- China and Other Asia grow 11 Mb/d

■ Exports

- Mexico down 1 Mbd
- Russia, Caspian, West Africa add 9 Mb/d
- Non-Middle East OPEC adds 3 Mb/d
- Middle East OPEC adds 15 Mb/d

<i>Mb/d</i>	Trade		
	2001	2025	Change
Regional imports			
Industrial	23	38	15
Non-OPEC So Amer	1	1	0
Other Asia	6	11	5
China	2	8	6
	32	57	26
Regional exports			
Mexico	2	1	-1
Non-OPEC Africa	1	5	4
Russia/Caspian/EE	4	9	5
OPEC-nonME	7	10	3
OPEC-ME	18	33	15
	32	57	26
Regional trade share			
	41%	50%	

US Energy Information Agency,
2004 Annual Energy Outlook

US EIA projected world oil volume grows 37 Mb/d

- Real oil price about flat at \$25/b
- World oil market volume grows 37 Mb/d
 - Non-OPEC 14 Mb/d
 - OPEC 23 Mb/d
- Industrial countries' supply drops 3 Mb/d
- Outside OPEC, big increases
 - South America 4 Mb/d
 - West Africa 4 Mb/d
 - Russia/Caspian/EE 8 Mb/d
- OPEC
 - Non-Middle East 4 Mb/d
 - Middle East 19 Mb/d

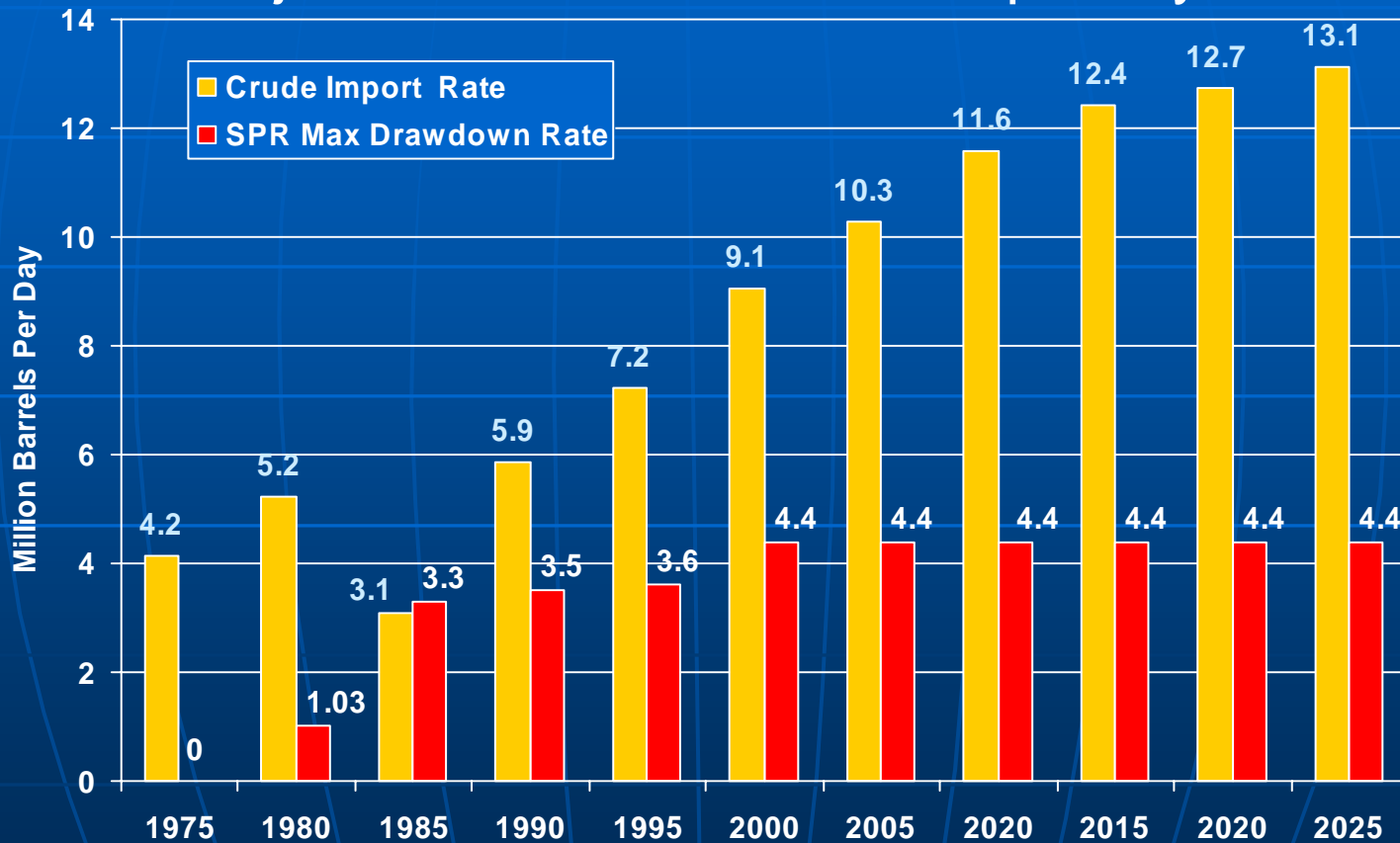
<i>Mb/d</i>	Supply		
	2001	2025	<i>Change</i>
Importers			
Industrial	19	16	-3
Non-OPEC So America	4	7	3
Other Asia	4	5	1
China	3	3	0
Exporters			
Mexico	4	5	1
Non-OPEC Africa	3	7	4
Russia/Caspian/EE	9	17	8
OPEC-non ME	10	14	4
OPEC-ME	21	40	19
World*	77	114	37
<i>of which:</i>			
Non-OPEC supply	46	60	14
OPEC supply	31	54	23

** includes non-conventional production*

US Energy Information Agency,
2004 Annual Energy Outlook

How much can Strategic Storage do in a world with shrinking inventories?

Projected SPR Drawdown Capability



A parallel Washington universe -- “Neocon” policy

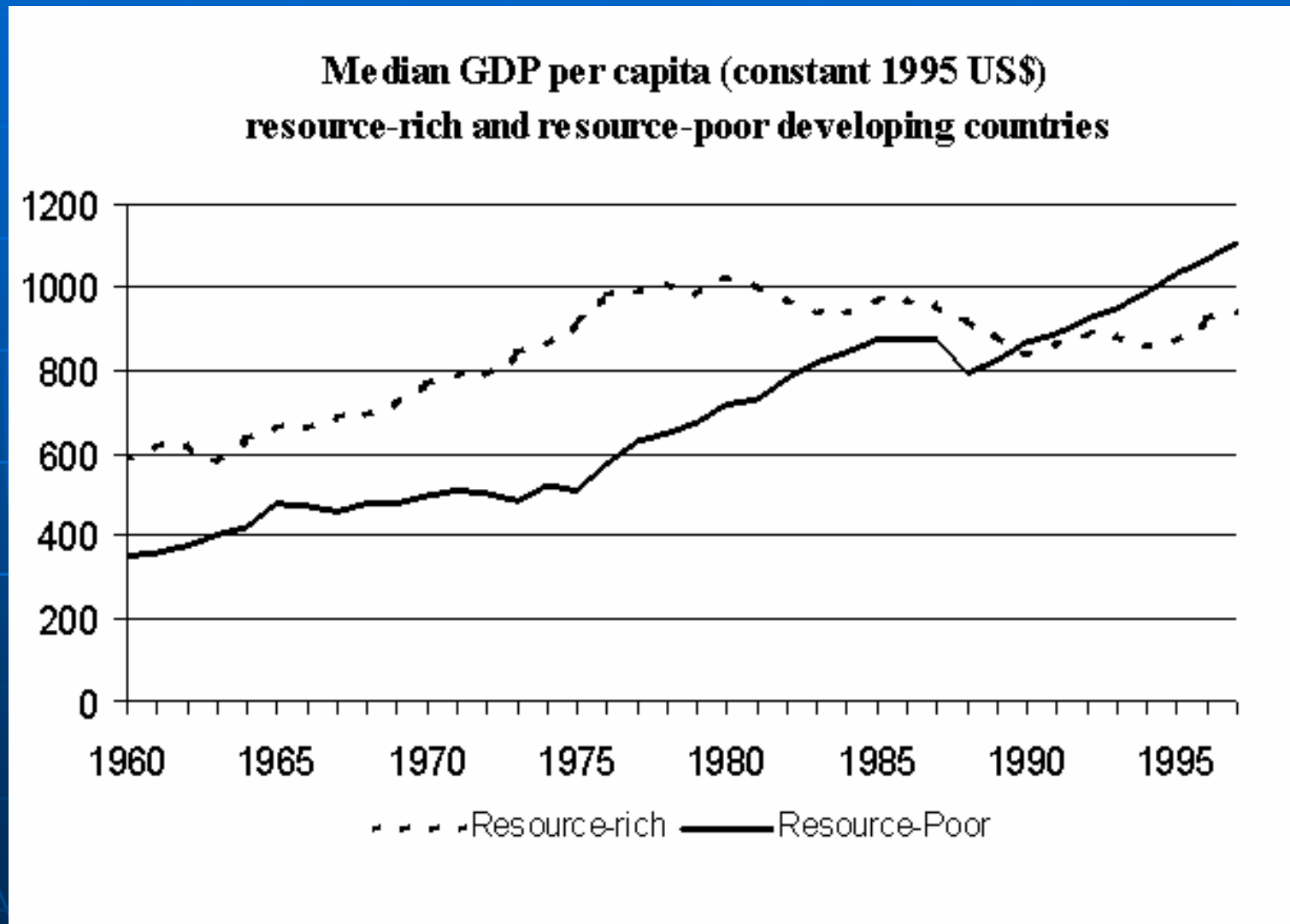
- *Supply diversification -- Russia, Caspian, Iraq, Iran(?)*
 - Can break the power of OPEC
 - Reduce prices
 - Deprive “terrorist” states of revenue
- *None of this makes any sense*
 - Low prices not in the interests of new, costly, privatized suppliers
 - Not enough new volume
 - New supplies are more unstable – costly oil, difficult access to world markets, political immaturity Oil policy can’t starve “terrorism revenue”

Conclusions

- **The Middle East will increase in importance**
- **Only Saudi Arabia (with Kuwait and UAE) has the capability of maintaining spare capacity**
 - **Low cost capacity**
 - **National oil company**
 - **Sovereign interest in stability**

Oil exporters' economic development

Oil exports don't foster economic development



“Resource curse”

- **Countries with large resource exports**
 - Have stifled agriculture and manufacturing sectors
 - Incur massive debt
 - Develop “clients” political systems
 - Gulf
Venezuela
 - Indonesia – controlled corruption
 - Nigeria -- pervasive corruption
- **Why**
 - “Dutch disease” raises prices of non-traded factors
 - Rent-seeking corrupts institutions

“Rent seeking”

■ Impact on governance incentives

- *Surplus* => no necessity for efficient performance
- *Sovereign governance* => rent-sharing,
not maximization of value added
- *Political “rent-seeking”*
 - participation, procurement, employment, pricing
- *Personal “rent-seeking”* – “corruption”

■ Leads to

- economic inefficiency
- stultified institutional development
- smothered political and economic growth

Remedies

- Corporatized and competitive oil company
- Development and non-oil sector independent and competitively financed
- Transparent revenues
- Transparent procurement
- Key international security issue going forward