ALASKA LEGISLATURE COMMITTEE FILES 2007-2008 SRES 12696

ACES

SRES HB 2001

Oct 20, 2007 2nd day in SRES

added to AGENDA:

— re: Exempt Auditors —

Kevin Brooks Dep Com of Admin

Nickie Neal Dir, Div of Personnel & Labor Relations

AGENDA — II AK's Global Competitiveness Under Aces

① Roger Marks re govt take

- Metrics - different types

- Two models internal

② PFC Energy - Thorsten Wuckerfennig

from 190 projects worldwide

③ Peer group countries/

compare those states against AK

what drives investment to

their shores

① Roger Marks — side by side analysis

long discussion page 2 of "ACES 10-20-07" slides

re: ACES vs PPT schematic

ppt ACES side by side

— "Fair Share" to govt

(3) PFC Energy –
Torsten Wucherpfennig

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October 16, 2007

Presented 10-20-2007 @ SRES hearing, SB2001

MEMORANDUM

RE: Oil Company Capital Spending

Oil companies are by definition in business to make a profit. Their actions are aimed at removing or preventing any barriers to achieving increased profits. Taxes are a barrier to achieving profits and when raised serve to reduce profits and when lowered serve to increase profits. Thus, oil companies are naturally predisposed to oppose any increase in taxes. With all things being equal (which they rarely are), oil companies would preferentially invest in areas with the lowest taxes, however this is not the real world calculus.

When materiality and prospectivity are added to the investment decision criteria, oil companies quite often end up investing in countries with relatively high or above average tax rates. They do so because they believe (and often realize) that investments in those countries will provide access to new reserves and will generate significant profits. Similarly, countries that offer extraordinary potential (like Angola, Russia and Kazakhstan) are able to command a greater share of the total pie while, at the other extreme areas which have extremely favorable tax regimes (like Ireland and Morocco) still do not attract significant industry interest.

The oil companies are – rationally – resisting initiatives to increase their effective tax burdens and attempting to boil down the issue of fiscal policy and its impact on their capital investment decision making to a single factor: **the effective tax rate**. But the issue is not that simple. The oil companies must, if they are to remain in existence, do a good job at profitably replacing the reserves that they are currently producing. The number of locales in the world that offer the larger oil companies the needed level of materiality to do that are limited in number. ExxonMobil, BP, Chevron and ConocoPhillips for example, together produce over 12 million barrels of oil equivalent per day – to simply replace their production they need to find a Kuparuk size accumulation every 8 to 9 months!

The oil companies have compared Alaska's tax regime to mainly other lower 48 United States tax regimes; however, such a comparison would only be valid for a small portion of their overall investment capital spending. Lehman recently published a survey of 350 companies that showed estimated total worldwide capital spending in 2007 of just over US$300 billion of which roughly one quarter or US$77 billion would be in the United States (including Alaska). Overall, 2007 numbers represented over a 20% increase for international (i.e. non-US or Canada) spending with United States spending up slightly and Canadian spending down.

Looking at just the United States, expected 2007 spending represents an increase of 4.8% over 2006. A further breakdown of the numbers by Lehman shows that smaller companies (those with annual spending under US$1 billion) were estimating increasing their spending by some 10+% for 2007 while the large oil companies were only expecting spending in the United States to increase 1.2%.

The Lehman data seem to be corroborated by data in the oil companies' annual reports. Gaffney, Cline & Associates reviewed annual reports for BP, Chevron, ConocoPhillips and ExxonMobil for 2002 through 2006. Where available, capital spending data overall and in the United States for the upstream sector were used. Where such geographic breakdown was not provided data for corporate spending were used to arrive at the numbers below. The key piece of information is not the absolute value, but the trend of where the main players in Alaska are spending the bulk of their investment dollar. For upstream spending BP's investments outside the United States represented 50% to 75% of their overall total. Similar numbers for Chevron were 67% to 71%, ConocoPhillips 63% to 75% and ExxonMobil 77% to 85%.

		Capital Spending [illegible]									
		2006		2005		[illegible]		[illegible]		[illegible]	
BP:	US	$6,592	50%	$3,870	38%	$3,913	36%	$3,906	26%	$3,100	32%
	International	$6,526	50%	$6,367	62%	$7,095	64%	$11,286	74%	$6,559	68%
	TOTAL	$13,118		$10,237		$11,008		$15,192		$9,659	
Exxon:	US	$2,486	15%	$2,142	15%	$1,922	16%	$2,125	18%	$2,357	23%
	International	$13,745	85%	$12,328	85%	$9,793	84%	$9,863	82%	$8,037	77%
	TOTAL	$16,231		$14,470		$11,715		$11,988		$10,394	
Conoco:	Alaska	$820	9%	$746	11%	$645	12%	$570	13%	$706	22%
	US (Continental)	$2,008	21%	$891	13%	$669	12%	$848	19%	$499	15%
	International	$6,685	70%	$5,047	76%	$3,935	75%	$3,090	68%	$2,071	63%
	TOTAL	$9,513		$6,684		$5,249		$4,508		$3,276	
Chevron:	US	$4,123	32%	$2,450	29%	$1,820	29%	$1,641	29%	$1,888	30%
	International	$8,696	68%	$5,939	71%	$4,501	71%	$4,034	71%	$4,395	70%
	TOTAL	$12,819		$8,389		$6,321		$5,675		$6,283	

Moreover, the review of the annual reports show investment by these four companies in significant projects in jurisdictions that have average and marginal tax rates above those in place or proposed in Alaska.

In deciding where to invest, tax policy is one of the factors considered but is demonstrably not, in and of itself, the controlling factor.

In S[illegible]
10-20-2007

Case Studies: Government Competition for Oil & Gas Investment

Dr Michael Williams
Ch. Economist D.O.R.

Rich Ruggiero } Gaffney Cline
Bob George } Associates

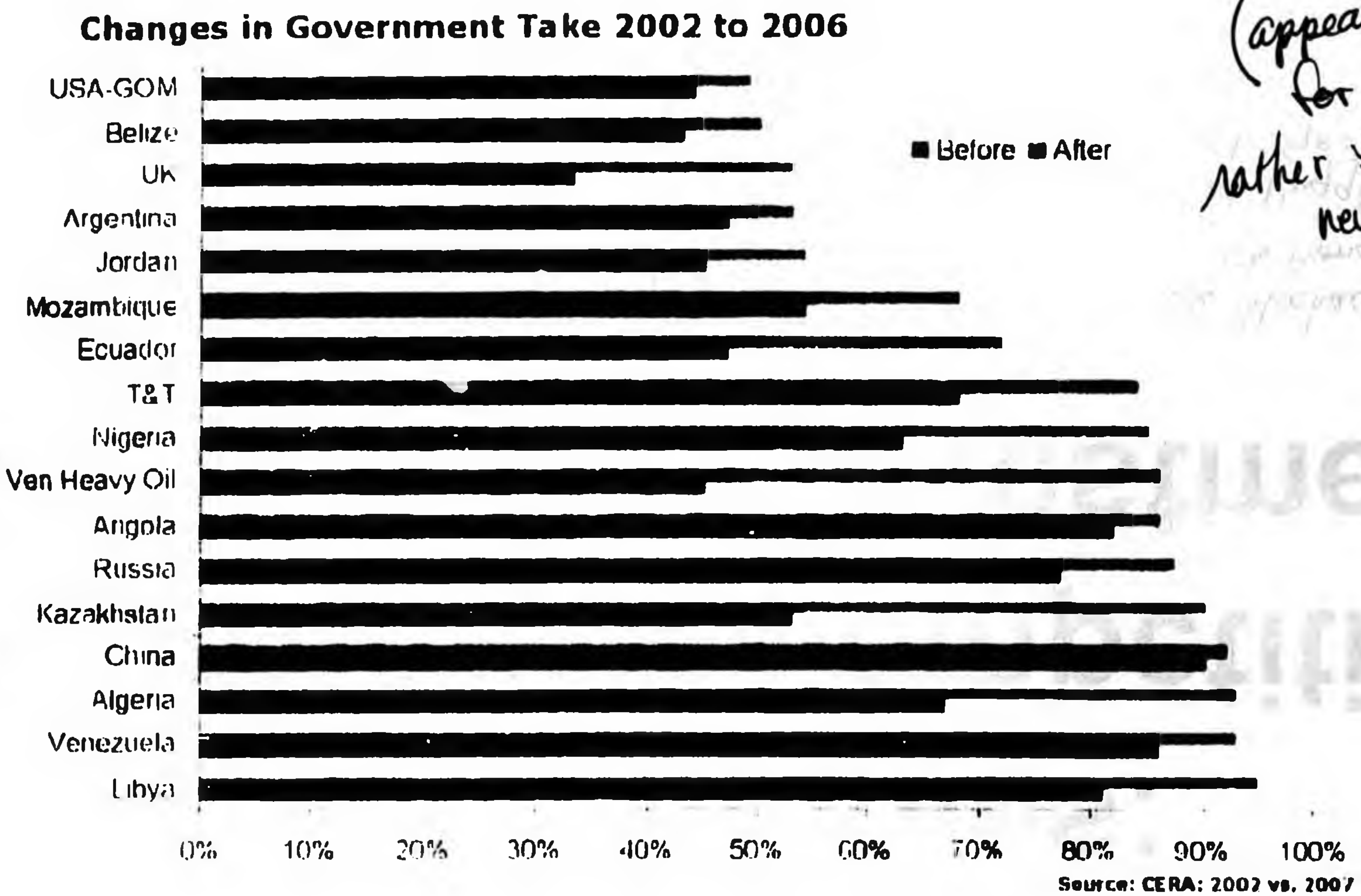
Alaska Department of Revenue,
October 2007, Juneau, Alaska
Michael D. Williams, Chief Economist

Capturing "Fair Share"

Assessment of Oil and Gas Jurisdictions is Complex and Continuous

Chevron

(Rich Ruggiero appears to be for new developments) rather than new + existing projects

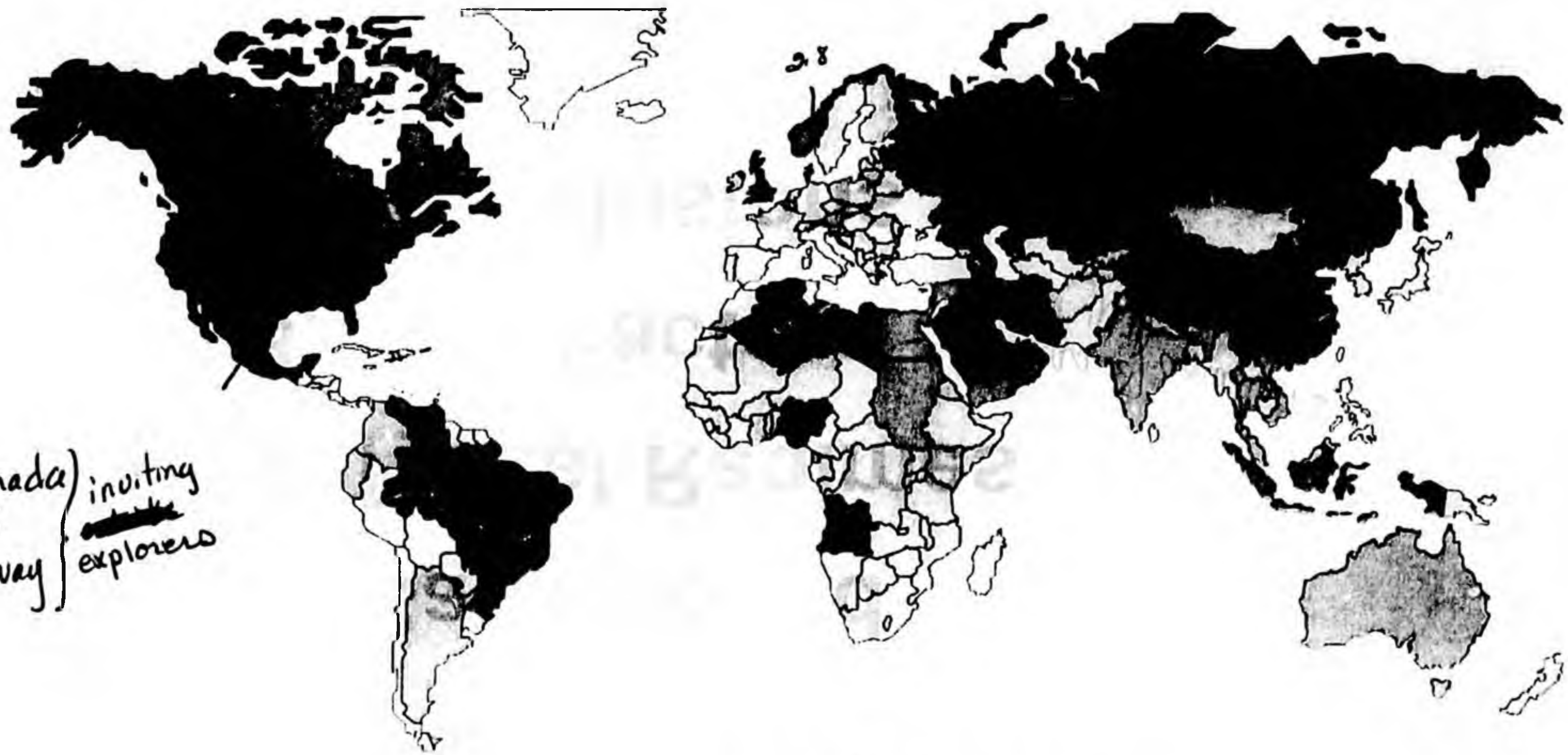


Source: Report of the Alberta Royalty Review Panel, "Our Fair Share", page 29.

Today's Agenda

1. Background
2. Fiscal Regimes
3. Key Factors – 6 areas of analysis (per Williams)
4. Conclusions

Oil Producing Countries



Canada
US
Norway
inviting ~~[illegible]~~ explorers

#'s in thousands

- > 5.000
- 5.000 - 1.001
- 1.000 - 301
- 300 - 31
- Not significant or not available

Source, ENI, *World Oil & Gas Review 2007*, for 2006, crude oil and NGL's in thousands of barrels per day, page 13.

Types of Legal Systems

- **Production Sharing** – Uses a Production Sharing Contract [PSC], the contractor receives a share of production for services rendered.

- **Tax / Royalty** – Government licenses right to extract and sell resources and imposes financial obligations on resource extraction:
  - Royalty
  - Tax: on income, production, property.

Tax / Royalty Governments Comparison

- Alaska
- Alberta
- Norway
- United Kingdom
- US Gulf of Mexico [GOM]

25% of Royalty (gross tax) → Perm Fund

Alaska

- **Signature Bonus:** Yes
- **Royalty:** about 12.5% gross value @ pt of production negiotrated between state & developer leaseholder
- **Production Tax:** Petroleum Profits Tax, based on net income

refers to capital expenditures will give cost of investment plus a percentage

- **Tax Credits & Uplift:** Yes

not in AK

- **Property Tax:** Based on assessment

in AK state & local jurisdiction (N. Slope Borough - in unorganized borough $ goes to SOA

- **Corporate Income Tax:**
  - Alaska State = 9.4% of profit
  - US Federal* = 35% of profit

* Bonuses, Royalty, Production Tax, Property Tax, and State Corporate Income Tax are deduction from US Federal Income Tax.

Alberta

Conventional Oil

- **Signature Bonus:** Yes
- **Royalty*:** 14.78% —(on oil sands 25-30%)
- **Production Tax:** None
- **Tax Credits & Uplift:** No
- **Property Tax:** None
- **Corporate Income Tax:**
  - Federal = 20% of profit
  - Provincial = 10% of profit

Additive

* There are three tiers of royalty based upon the age of the well, those tiers are pre-1974, 1974-1992, and post-1992. The royalty rates are expressed in Canadian dollars per cubic meter and are sensitive to well productivity and market price. This analysis is for oil wells that went into production after 1992 and use the rate of $130.09 per cubic meter, which is a royalty rate of about 15%. See "Technical Royalty Report OG#2: Alberta's Conventional Oil and Gas Industry", Alberta Department of Energy, 2007, page 14.

Norway

- **Signature Bonus:** No
- **Royalty:** Phased out
- **Production Tax*:** 50% of profit
- **Tax Credits & Uplift:** Yes
- **Property Tax:** None
- **Corporate Income Tax*:** 28% of profit

* Production Tax and Corporate Income Tax are additive.

United Kingdom

- **Signature Bonus:** No
- **Royalty:** Discontinued for new fields in 1982 & older fields in 2003
- **Production Tax*:** Fields developed before March 1993 pay 25%; there is no tax on fields with development approval after March 1993.
- **Tax Credits & Uplift:** No
- **Property Tax:** None
- **Corporate Income Tax:** 50% of profit

* For fields in operation prior to 1993, the Petroleum Revenue Tax is due and is a tax on net income with detailed specifications for such items as lease costs, acquisition costs, abandonment costs, tariffs, etc. The PRT has a tax rate of 25% and the tax paid is deductible from profits in computing Corporate Income Tax.

US GOMexico

- (Lease) **Signature Bonus:** Yes (3.9 million per bid) last round 3.9 Billion award prior bonuses we insignificant
- **Royalty:** Royalty relief* for deep water
- **Production Tax:** None (offshore)
- **Tax Credits & Uplift:** Yes
- **Property Tax:** None (no state involvement)
- **Corporate Income Tax:** US Federal, 35% of profits

* The Deep Water Royalty Relief Act of 1995 expanded the Secretary's royalty relief authority in the GOM outer continental shelf. Under the Act, producers were able to exclude the first 87.5 million barrels of oil production from each lease from royalty when oil prices were under $34 per barrel. When contracts were actually approved, the price "trigger" was not included in the agreement, thus, the contracts between the oil companies and US government do not specify a price at which the royalty payment is required. On January 9, 2007 the US government royalty rate was increased to 16.7% from12.5% - but the 87.5 million barrel exclusion still applies, and there is still no price trigger in the contracts. significant royalty relief

Key Factors

1. **Prospectivity**
2. **Costs**
3. **Risk**
   - **Political**
   - **Fiscal Stability**
4. **Capital Depreciation Time Frame**
   Speed of recovery of a company
5. **Government Take**

Attractiveness of Oil & Gas Resources

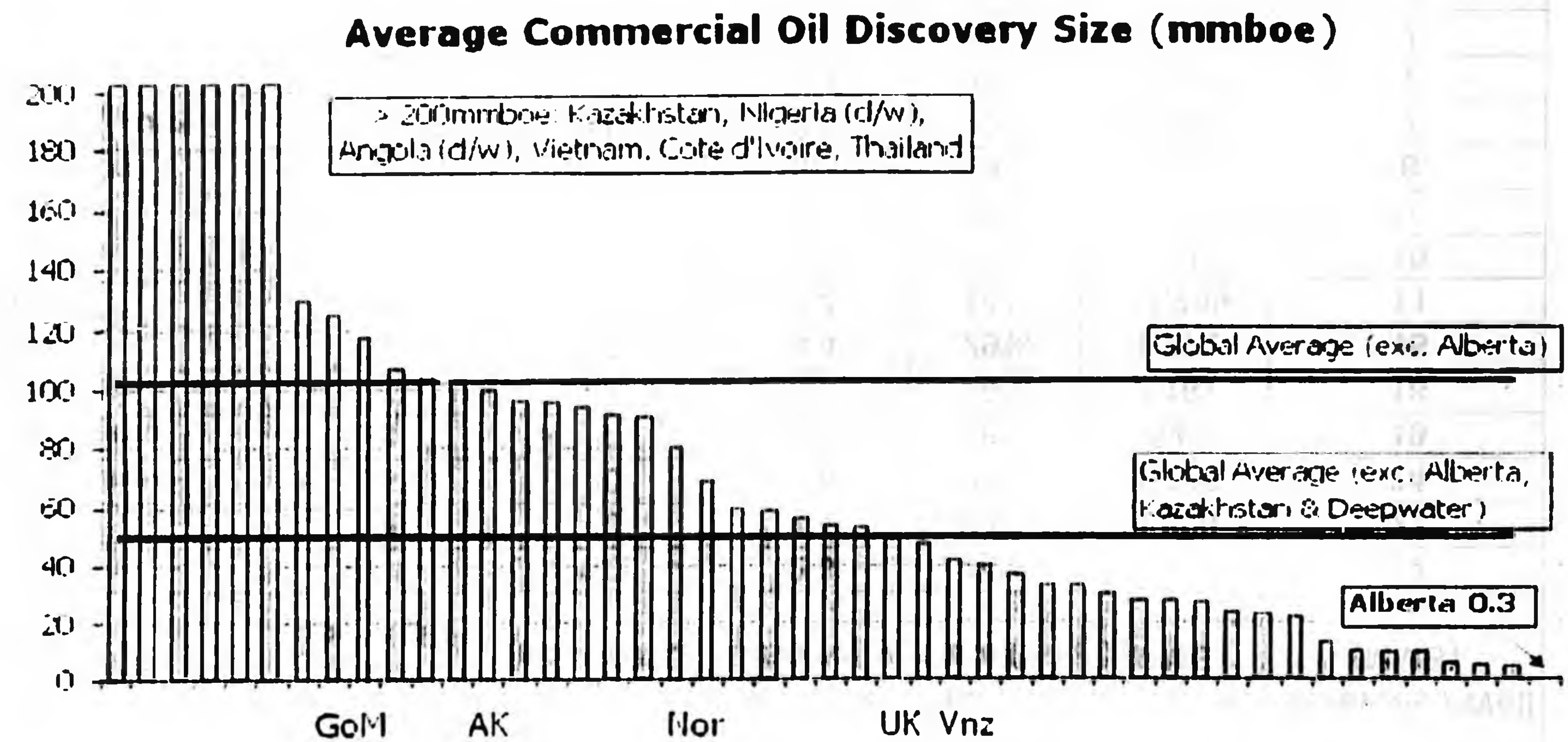
All Exploration & Discoveries Since 1990; Reserves are Reserves Added Since 1990

Country	Exploration Wells (post-1990)	Discoveries (post-1990)	Wells per Discovery	Success Rate (%)	Reserves (MMB)	Reserves / Well (MMB)
Angola	231	102	2.3	44%	14,223	62
Nigeria	315	76	4.1	24%	8,600	27
Eq. Guinea	75	20	3.8	27%	1,776	24
Mauritania	28	5	5.6	18%	522	19
Vietnam	179	42	4.3	24%	3,182	18
Congo	85	25	3.4	29%	1,272	15
Brazil	1,063	143	7.4	14%	11,789	11
Alaska	138	20	6.9	15%	1,415	10
Norway	369	74	5.0	20%	3,754	10
Malaysia	338	64	5.3	19%	2,708	8
Cote d'Ivoire	30	4	7.5	13%	221	7
Libya	319	72	4.4	23%	2,224	7
GOM	1,502	87	17.3	6%	6,200	4
UK	1,177	122	9.6	10%	3,826	3
Gabon	185	26	7.1	14%	472	3
Indonesia	1,200	193	6.2	16%	2,749	2
Argentina	1,110	230	4.8	21%	1,071	1
Australia	1,741	147	11.8	8%	1,600	1

Source: PFC Study September 2007, Alaska data from AOGCC and DNR

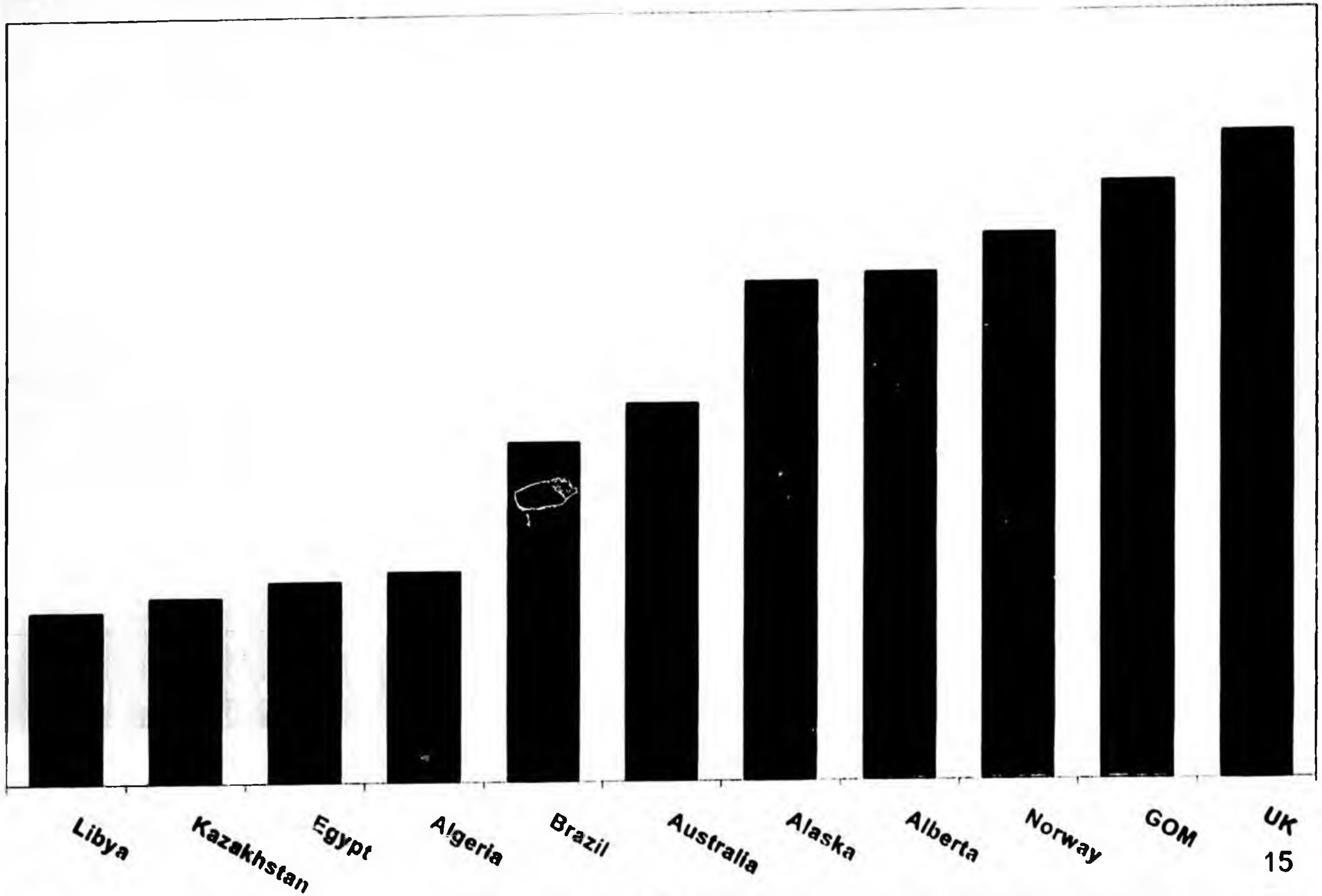
Conventional Oil Pool Size

1994 – 2003



Source: Report of the Alberta Royalty Review Panel, "Our Fair Share", page 50.

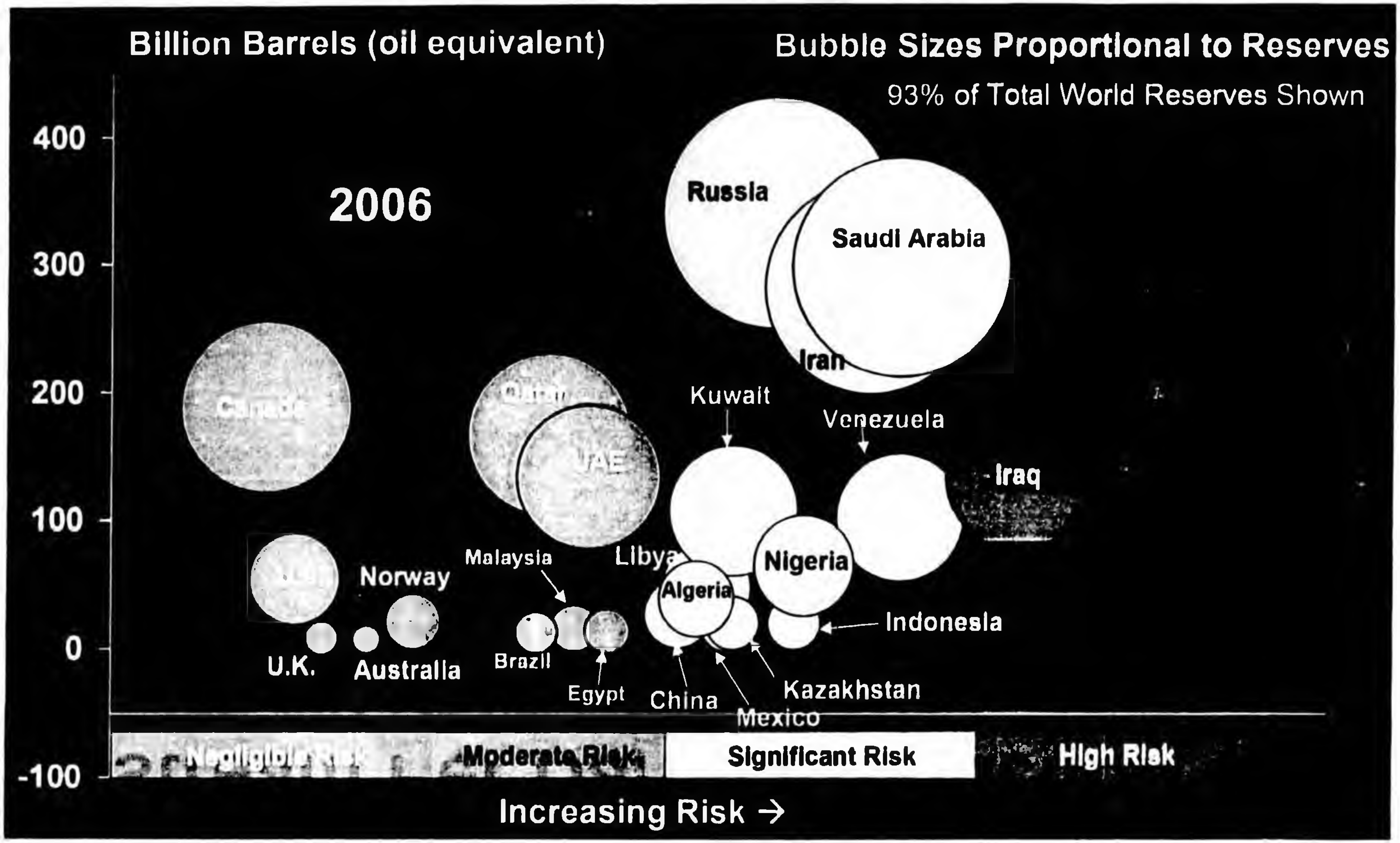
Upstream Per Barrel Production Cost



Dollars per barrel, includes capital and operating expense, most data from public sources.

Reserves Breakdown By Risk

Total Oil & Gas Reserves



Source: ConocoPhillips, Petroleum Equipment Suppliers Association, April 20, 2006

Reserves Breakdown By Risk

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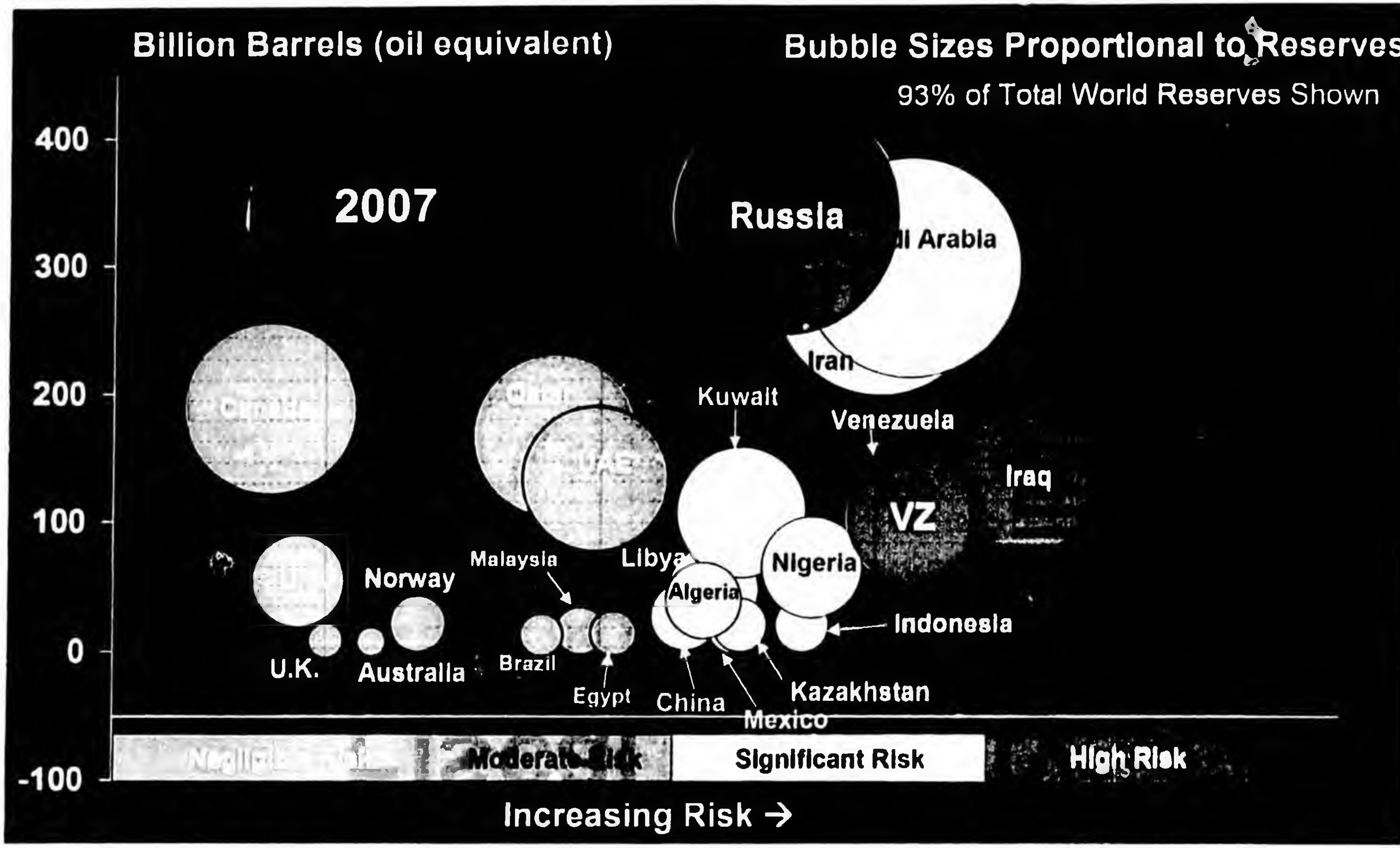
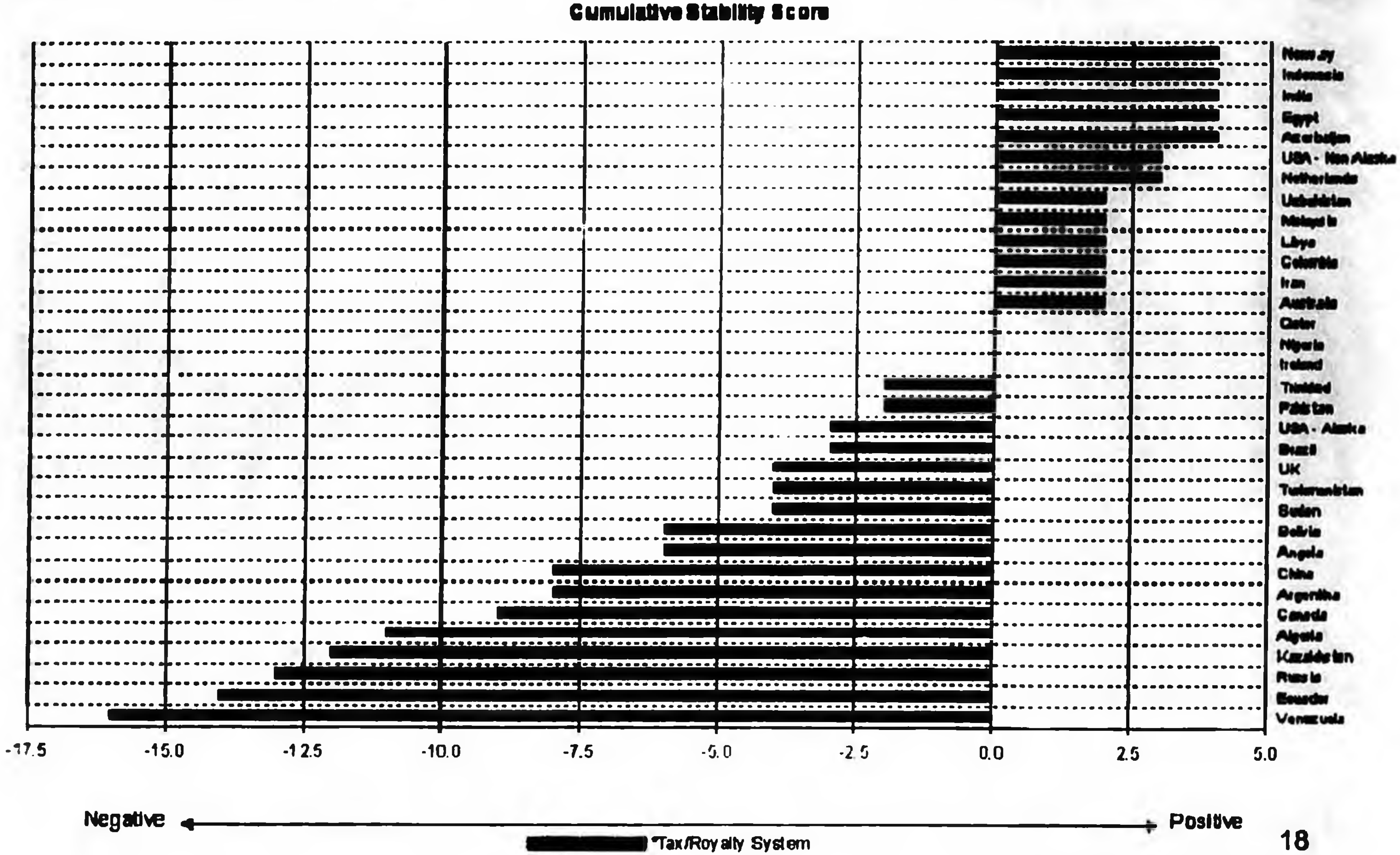


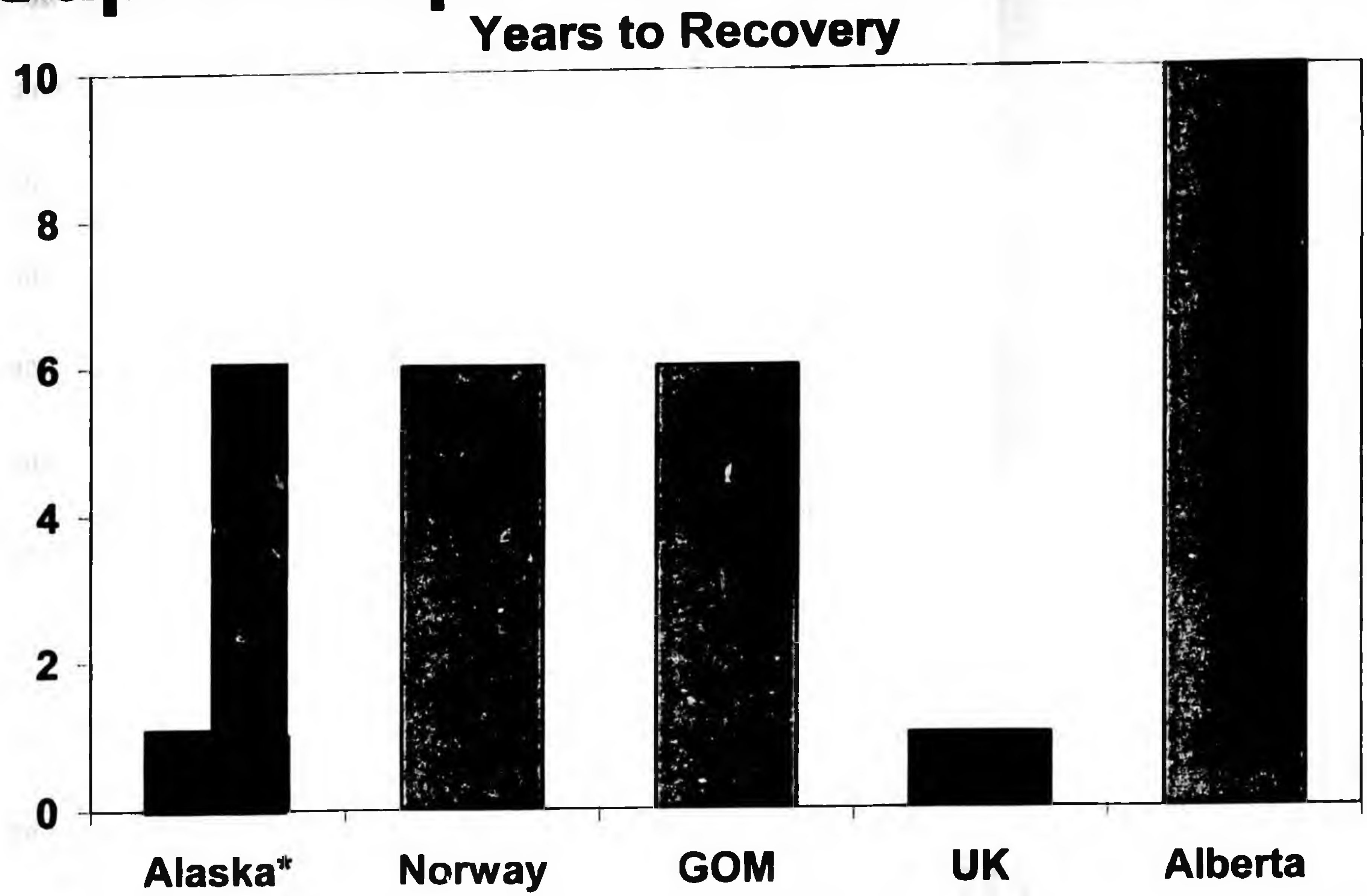
Source: Initial chart from ConocoPhillips, Petroleum Equipment Suppliers Association, April 20, 2006, adjusted by DOR to reflect 20[illegible] events.

Fiscal Stability



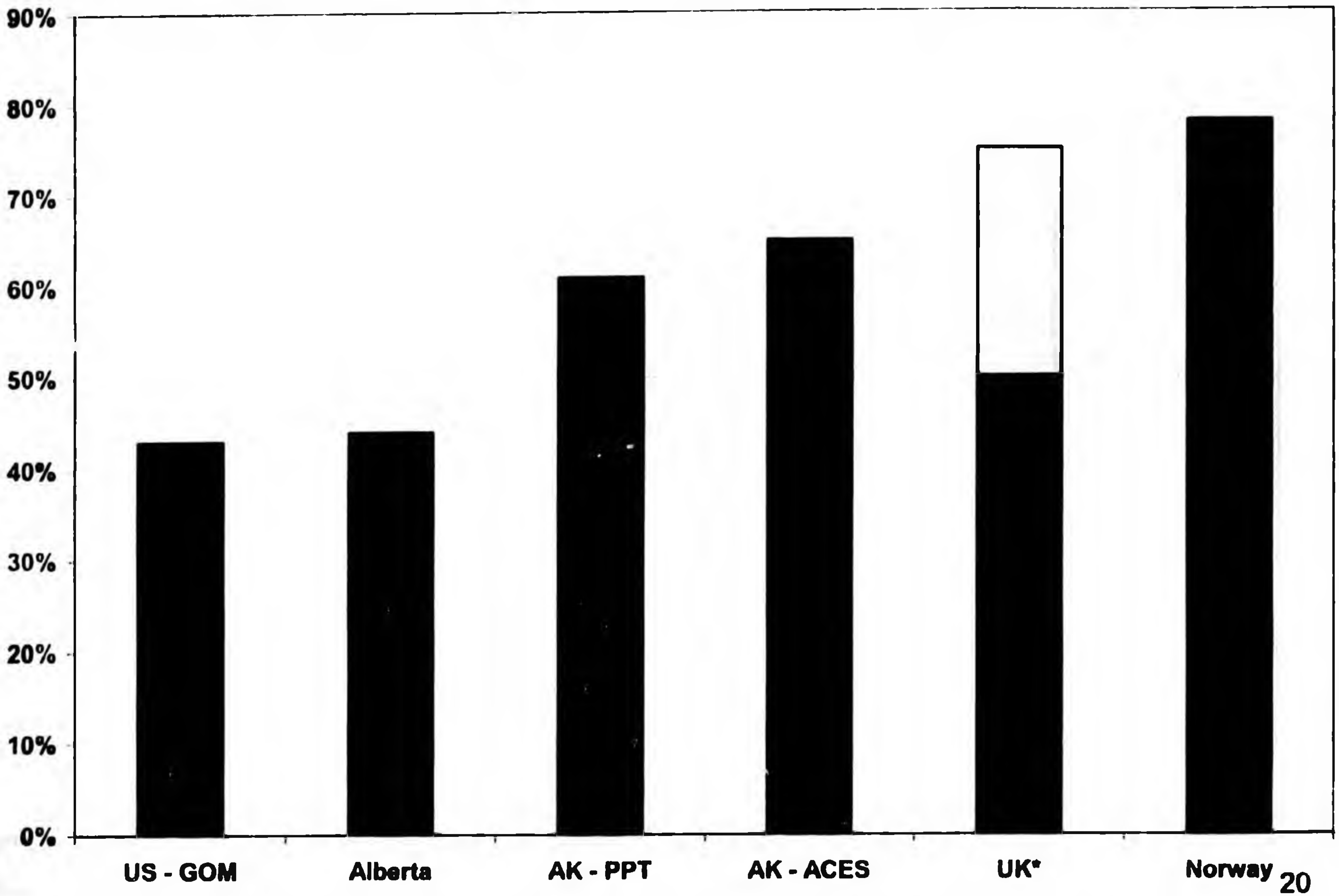
Source: PFC Study September 2007

Capital Depreciation Time Frame



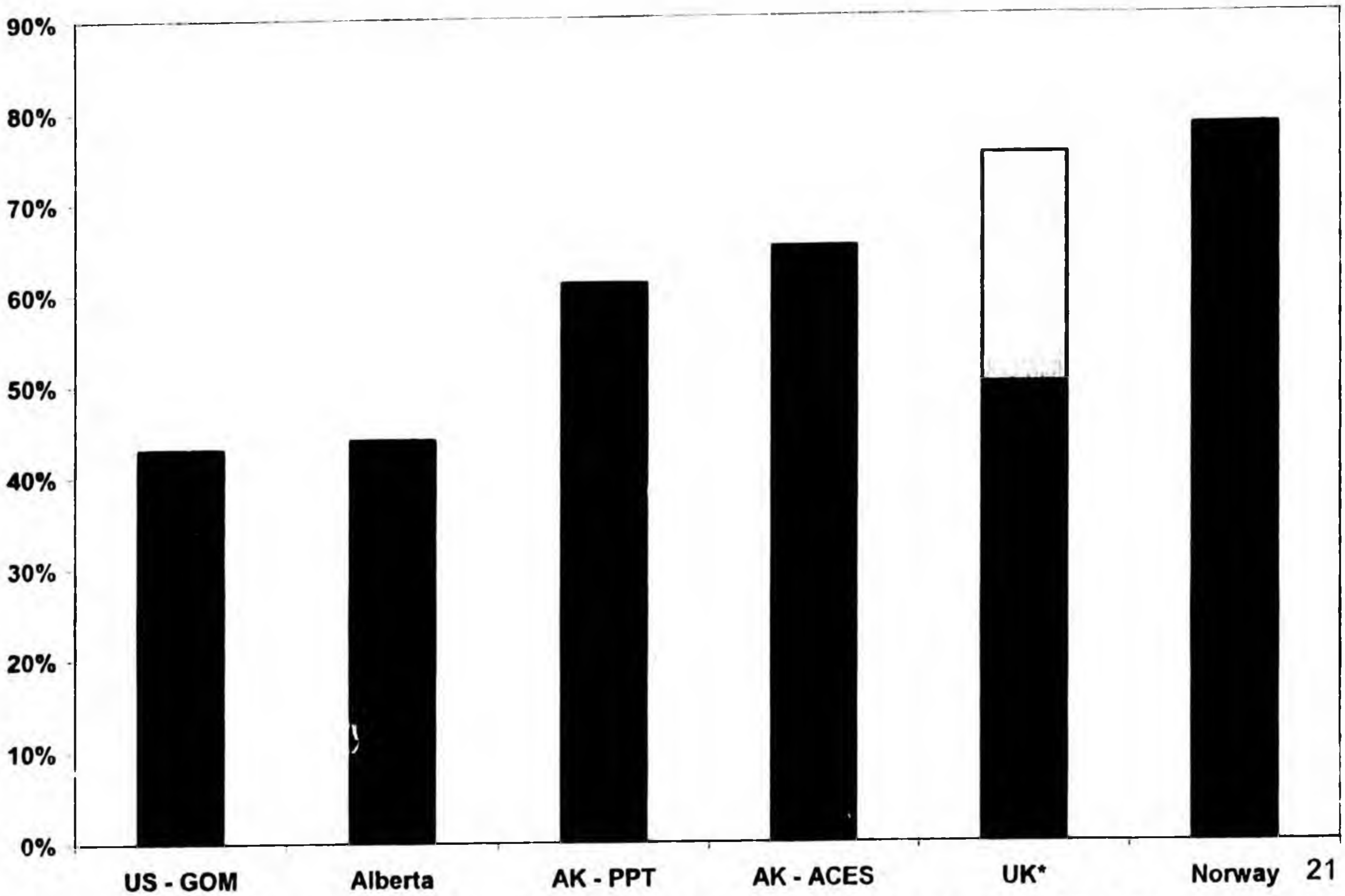
* Under PPT there is a one year write off, for Federal Corporate Income Taxes there is a depreciation schedule.

Marginal Government Take



Sources include Alberta Panel Review 2007, Wood Mackenzie 2007, PFC 2007, US General Accounting Office 2007

Cradle to Grave Government Take



Sources include Alberta Panel Review 2007, Wood Mackenzie 2007, PFC 2007, US General Accounting Office 2007

Where are the Capital $s being spent?

		Capital Spending ($millions)									
		2006		2005		2004		2003		2002	
BP:	**US**	$6,592	50%	$3,870	38%	$3,913	36%	$3,906	26%	$3,100	32%
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	TOTAL	**$12,819**		**$8,389**		**$6,321**		**$5,675**		**$6,283**	

Mentioned in 2006 Reporting Exploration and Development

- **BP**
  - Algeria, Angola, Australia, Azerbaijan, China, Egypt, Indonesia, Russia and Trinidad & Tobago
- **Chevron**
  - Angola, Australia, Brazil, Canada, Indonesia, Kazakhstan, Nigeria, Norway, the Partitioned Neutral Zone, Thailand, UK, and Trinidad/Venezuela.
- **ConocoPhillips**
  - Australia, Canada, China, Indonesia, Kazakhstan, Libya, Malaysia, Peru, Qatar, Russia, UK, Vietnam, and Venezuela
- **XOM**
  - Australia, Canada, Indonesia, Ireland Venezuela, Norway, Philippines, Qatar, and UAE

Conclusions

1. **Alaska is Competitive**
   - Peer Group
   - Worldwide
2. **Possible to Increase Government Take & Remain Competitive**

Strategic Advisors in Global Energy

Government Take Comparison

Prepared for the Department of Revenue, State of Alaska
Torsten Wucherpfennig, Manager Asset Valuation, PFC Energy

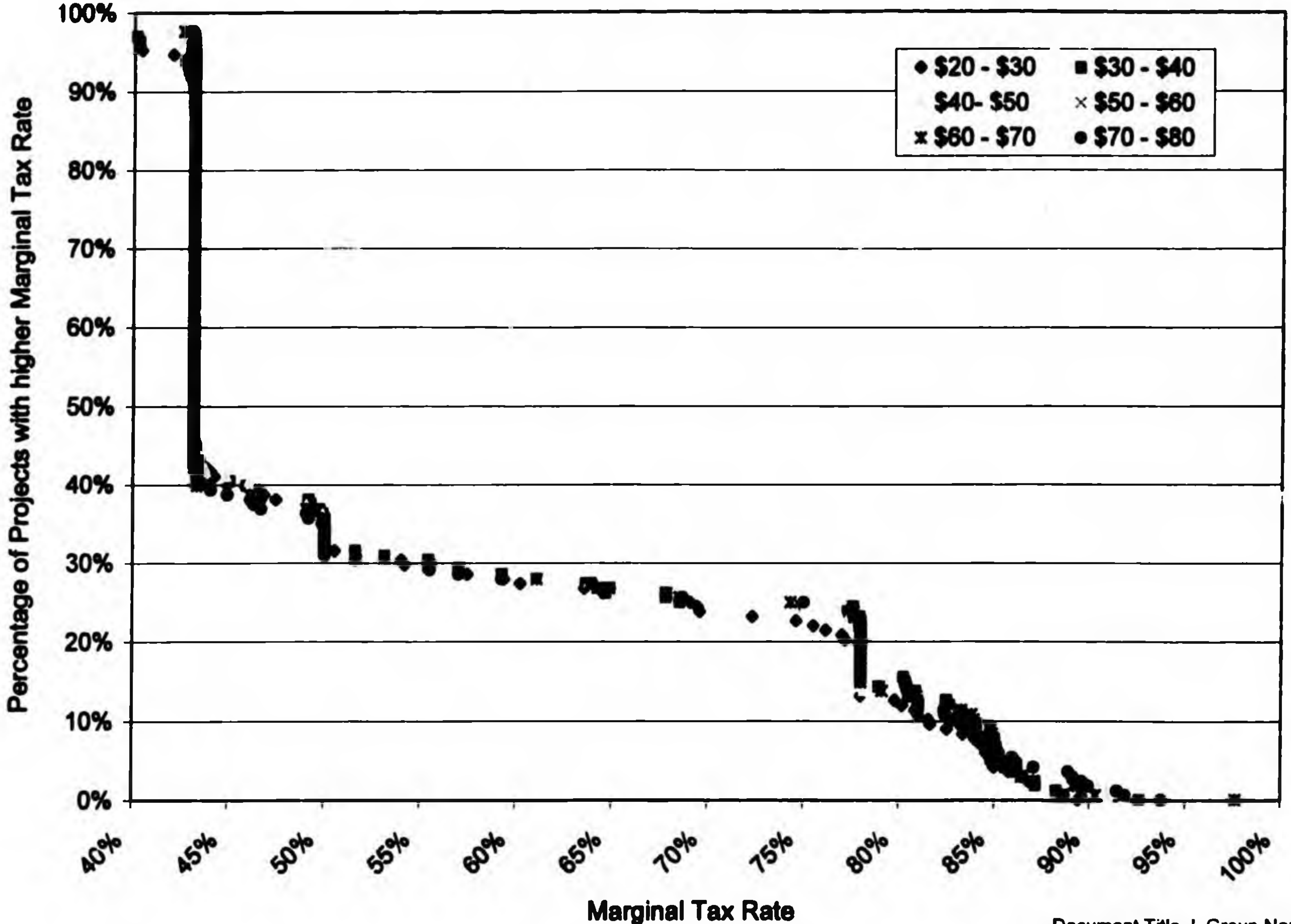
20 October 2007

PFC Energy

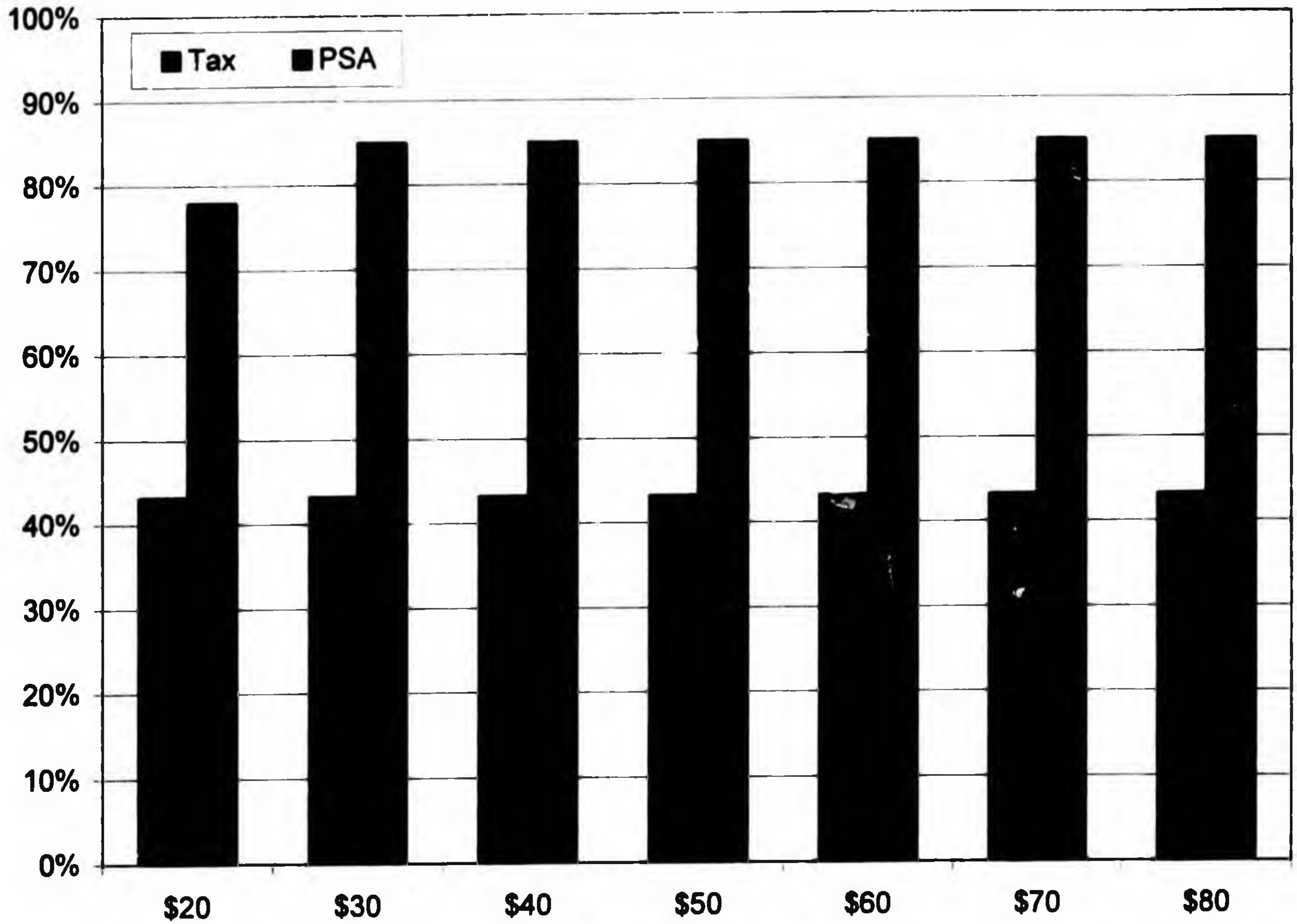
presented @ SRES hearing 10-20-2007 re: SB2001

Government Take

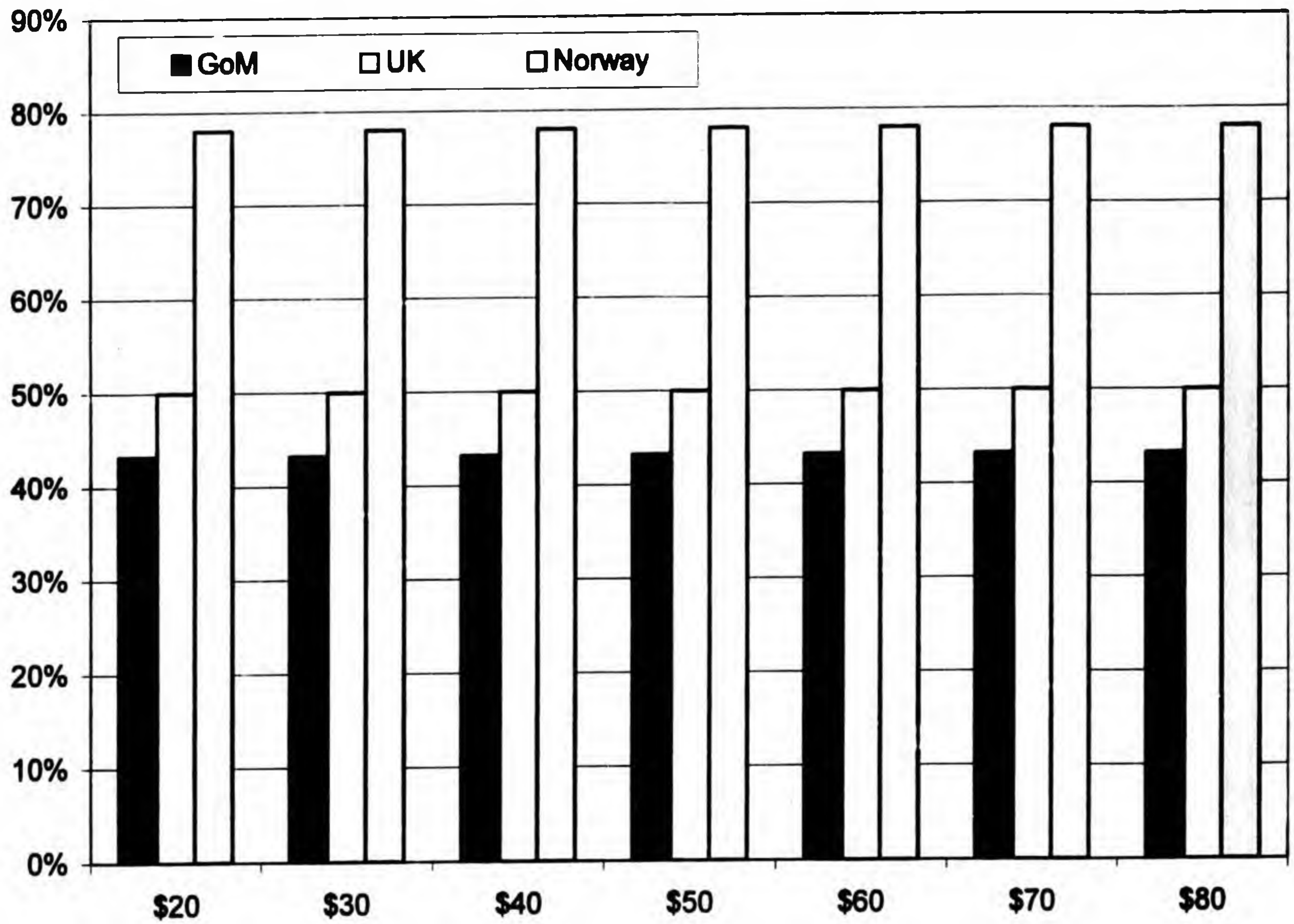
Distribution Marginal Tax Rate of 190 fields (All Projects)



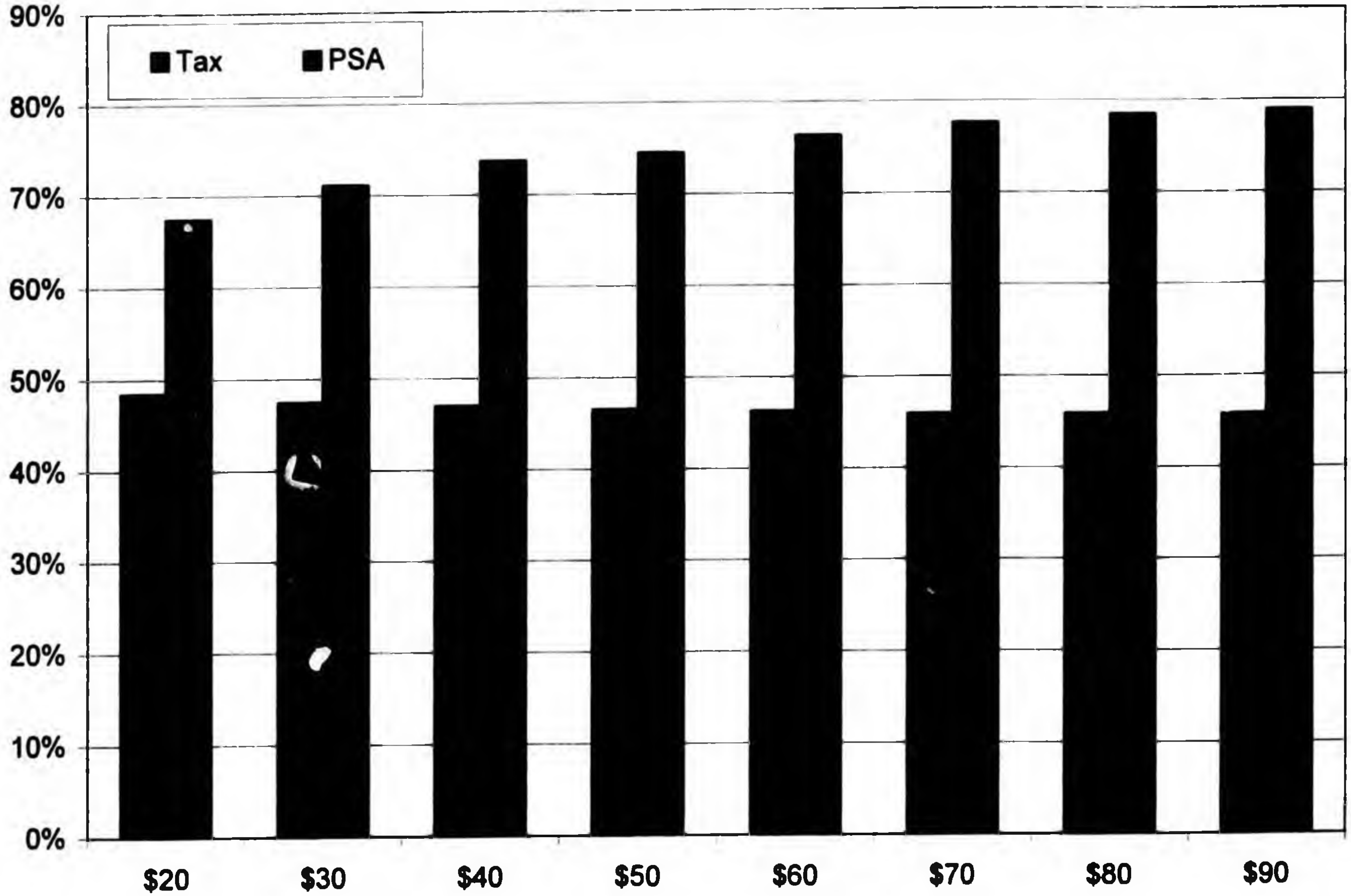
Median Marginal Tax Rate in Year 10 (by fiscal structure)



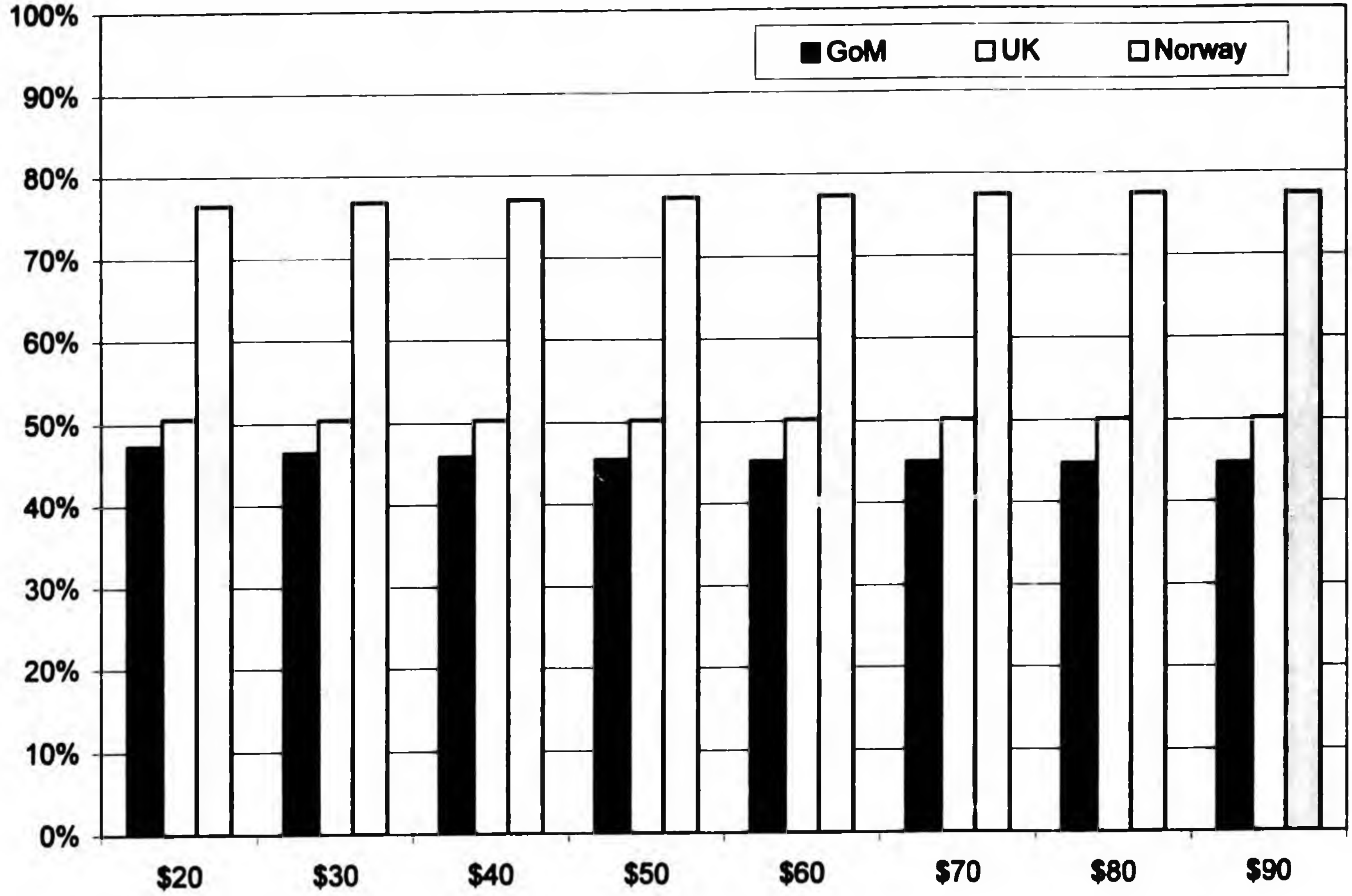
Median Marginal Tax Rate in Year 10 (by country)



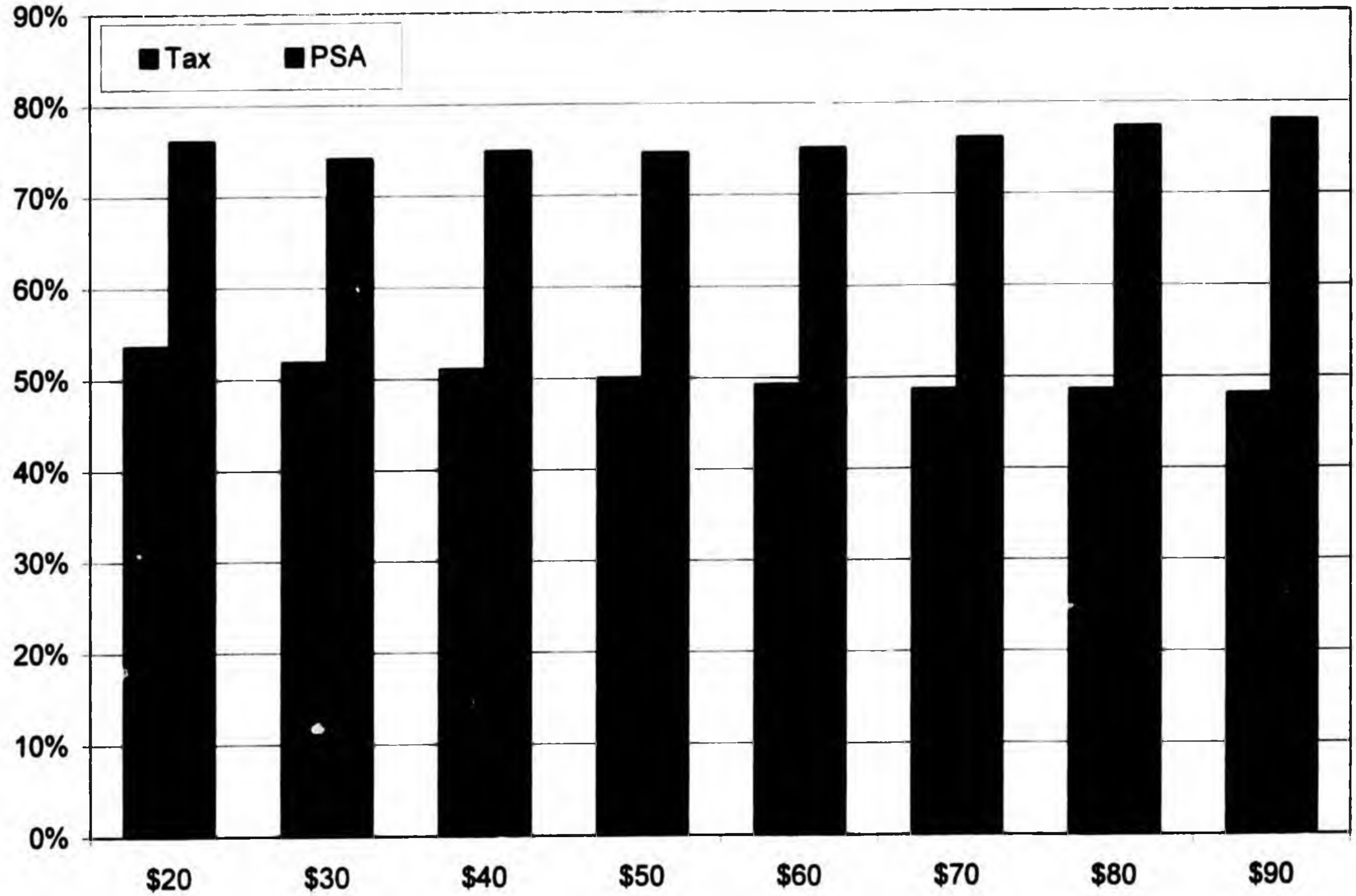
Median Undiscounted Government Take in Economic Rent (by fiscal structure)



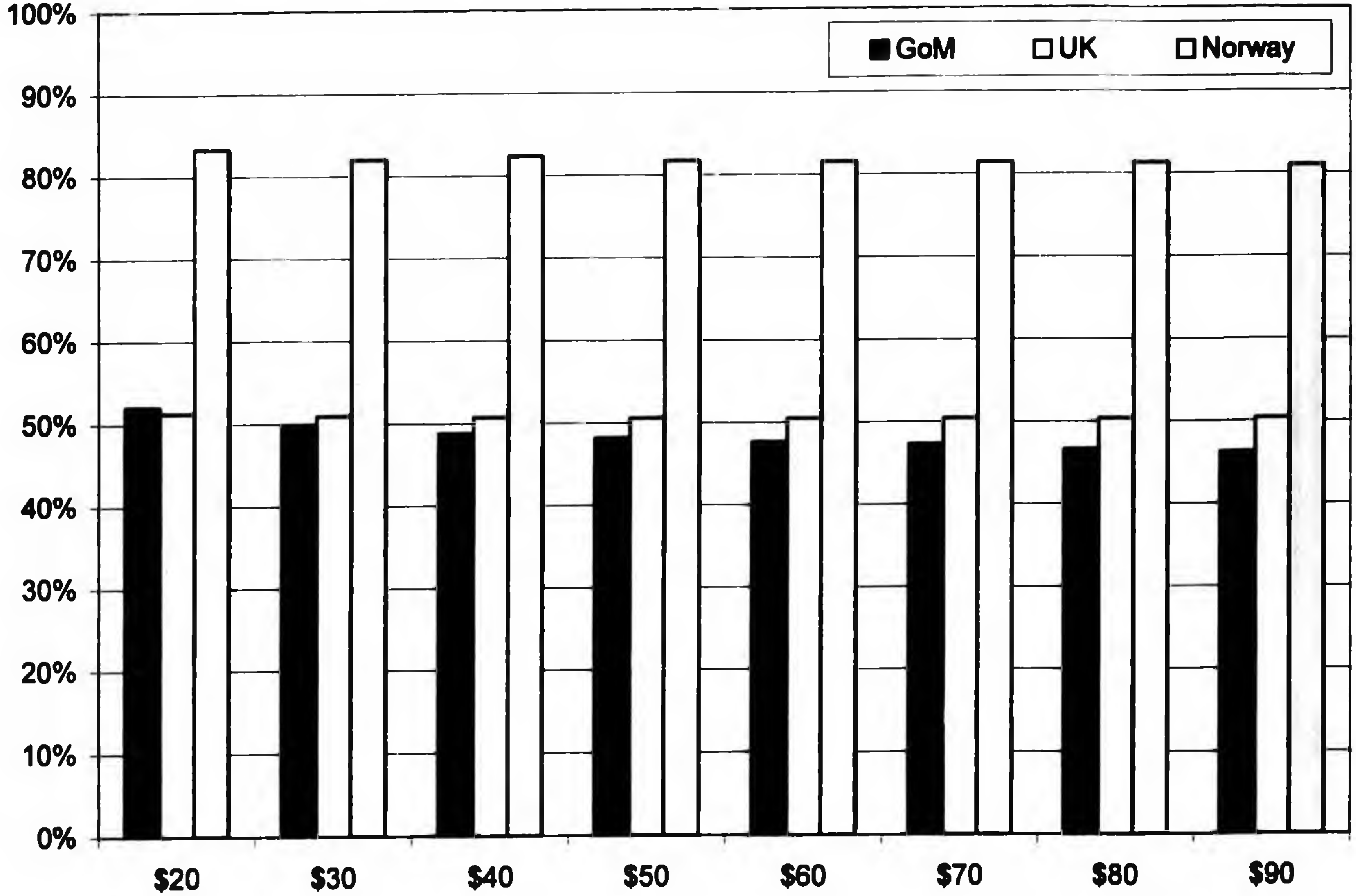
Median Undiscounted Government Take in Economic Rent (by country)



Median Discounted (10%) Government Take in Economic Rent (by fiscal structure)



Median Discounted (10%) Government Take in Economic Rent (by country)



PFC Energy

Strategic Advisors in Global Energy

PFC Energy consultants are present in the following locations:

- **Bahrain**
- Beijing
- Buenos Aires
- Calgary
- **Houston**
- **Kuala Lumpur**
- **Lausanne**
- London
- Mumbai
- New York
- **Paris**
- San Francisco
- **Washington, D.C.**

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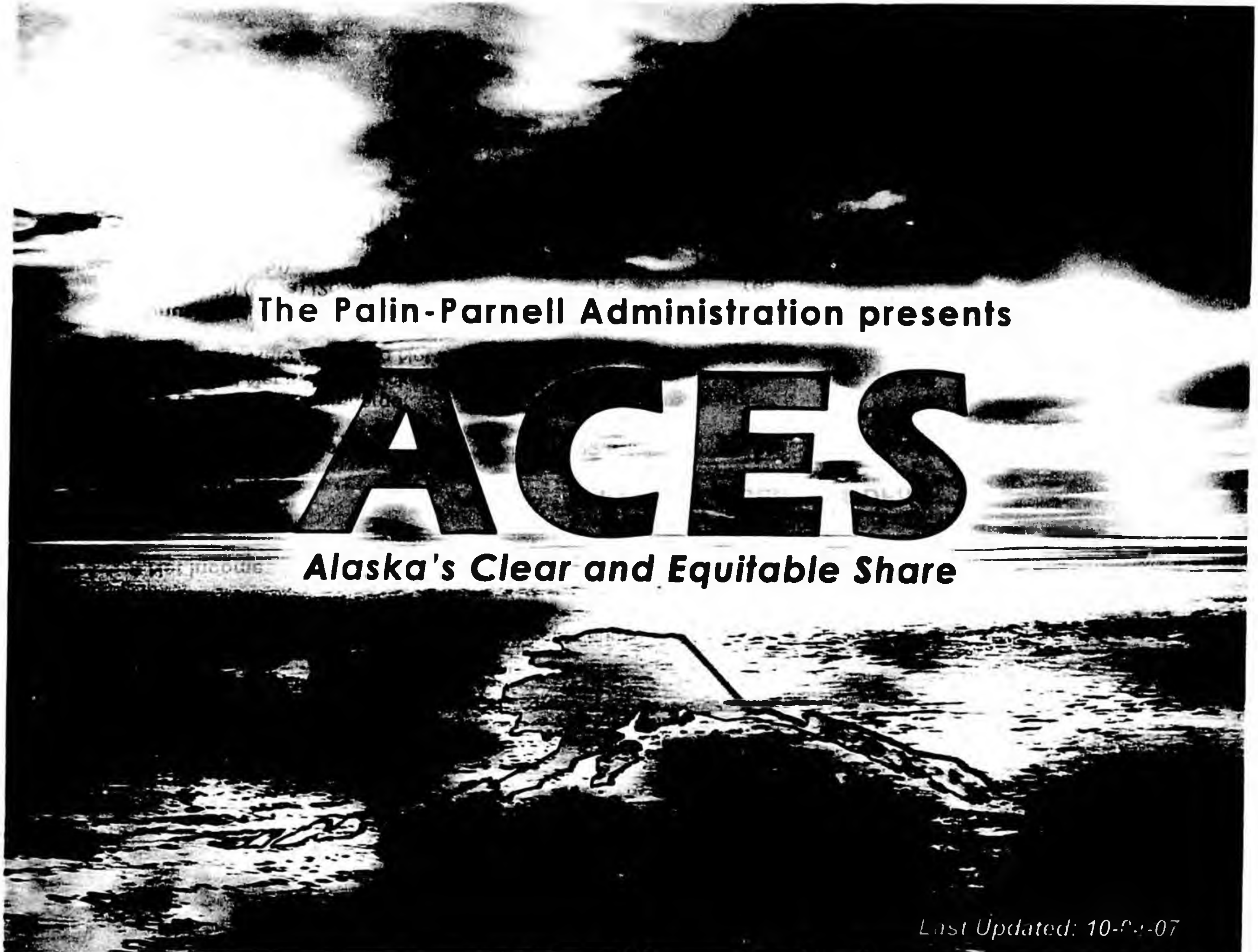

Saturday 10-20-07

Alaska's Clear and Equitable Share

ANS West Coast Price

- (minus Shipping/TAPS)

= Gross Value at the Point of Production

- (minus upstream capital costs [less 30 cents/bbl])
- (minus upstream operating costs)

= Net Income

	PPT	ACES	$ DFNC
Base Tax Rate on Net Income	22.5%	25.0%	$0.2 B
Plus Progressivity Surcharge:			
Per Barrel Net Income "Kicker"	$40	$30	$0.2 B
Surcharge Rate applied to Net Income	0.25% / $	0.20% / $	
(Minus Credits)			
- (Capital (023a) [20%])	Yes	Yes	
- (NOL (023b))	Yes	Yes	
- (Transition [TIE] (023i))	Yes	No	$0.2 B
- (Small Producer (024) [$12mm])	Yes	Yes	
- (Exploration (025))	Yes	Yes	
= Tax Payment	$1.4 B	$2.0 B	$0.60

FLOOR

ACES
Alaska's Clear and Equitable Share

PPT - HIGHER OF:

PPT Net Tax Payment

vs.

4% of Gross Income
(If ANS West Coast above $25/bbl)

ACES
FOR EACH UNIT WITH CUMULATIVE PRODUCTION OVER ONE BILLION BARRELS AND DAILY PRODUCTION OVER 100,000 BARRELS PER DAY
PAYMENT IS HIGHER OF:

ACES Net Tax Payment

vs.

10% of Gross

ACES

Alaska's Clear and Equitable Share

Measuring Government Fair Share: New Fields and Legacy Fields

Principles

ACES
Alaska's Clear and Equitable Share

- Fair share to government is an objective of fiscal systems (from the perspective of government)
- Based on international competitive opportunities commensurate with risk: make Alaska an attractive place to invest
- Needs to be an objective measurement of fair share that is systematically comparable
- The pattern of development is a) first comes investment, then b) returns are realized in subsequent years
- Measurement needs to recognize that investment decisions are based on forward-looking economics
- New fields are different from legacy fields

New Fields

ACES
Alaska's Clear and Equitable Share

- All costs are prospective
- Look at "take"
  - Take is a life-cycle concept
  - Percentage of economic rent going to government
  - Economic rent is gross revenues less costs (before taxes)
  - Discounting recognizes cost of capital – timing of take matters

Legacy Fields

ACES

Alaska's Clear and Equitable Share

- Many costs have already been incurred
- Measurements that look at cash flow in a single year can be deceptive as:
  - Large costs are often incurred in discreet time-frames (lumpiness)
  - Returns are realized after these investments
  - A single year cannot depict the economic picture
  - Systematic international comparisons for a particular year are meaningless