AK. Reserves Tax. 1981

My comments

1. Neutrality of ec. effects, re time of extraction, incentive to explore, etc.

2. Choice of cap. rate

3. Tax leasehold, until it is abandoned, based on bonus bid, etc.

4. Rate: $300/ day. (no travel)
   If travel, 400/ day.

5. Comm.
   RRG for AK. majors.

Re Ak. Tax, Ad Val.

1. 3%, 7/1/81 - 6/30/82
   2%, after 7/1/82

2. Leaseholds taxed.

3. Tax credit = Corp. Inc. Tax (as 43.21)
   (Thus, this tax is a floor)

4. "Proven reserves" only — (want defn.?) Sec 6
   DCF valuation

5. Cap. rate = Infln. rate + 7%
   Infln. rate = GNP deflator, 5 yrs preceding date

6. Proven reserves: known deposit, recoverable "in future under prevailing ec. conditions & technology."
   (When? Now or then?)

7. Taxable prop. is that "having comm. prodn."
   (Tax gas if produc'g oil?)

Outline, AK.

I. Advantages of rev. tax

A. Unambiguous jurisdn., unassailable. ~~Supplement opinion~~

1. In rem.

Based on situs of rem. Under common (over)

No ~~Allocation~~ apportionment.

Leg. shifted corp. inc. tax from "apportionment" of ch. 20 to "allocn" on separate accts of ch. 21, showed desire to move this way. But under any inc. tax, problems are formidable.

Another tax in rem is net proceeds.

(Problem probly is, leg. desire to exempt min. corp. sources. Can adopt other means to help small bus.)

2. Longer hist.

3. ~~No~~ fed'ly unpreempted.

4. ~~Taxed on~~ No issue of intangible discr.

~~Many states same limits for, overreaching.~~

Direct tax, presumed not shifted, a position

of Messenger, 5/22/81.

land, all interests in r.e., including a fee, are
held subject to various overriding sov. powers of
state, such as police power, em. domain, and
including taxes. ~~Even those of homestead vets.~~
~~some states even this~~ w/o ref. to benefits recd.

supported by ec. ~~tkg.~~ tkg. – in no way an export tax.

Out of state resid. of owners is no issue. Based on r.e., not persons. Some states min limit for ownership.

5. Some states & localities very hi rates No limit, other than self-imposed by states.

6. Many states classify property, put highest rate on minerals.

7. Only problem might be to make it an obvious stand-in for a vulnerable corp. inc. tax of Ch. 21. Can stand on its (own ~~own~~)

B. Focuses on non-functional inc.

Purps. to mfrs. are divided into fnd. & nonfnd. Former serve as incentives & rewards, inducements to get useful work done, to attract & hold needed capl.

Latter are pure surpluses, normally from holding superior res. like oil reserves.

Base. tax focuses on nonfnd. surplus.
At proposed 2.5% rate, no significant.

own feet, but maybe not on others. Still, not try
to raise same revs. from same firms or shops, etc.

effects. Only limits on rate might be acc. prodn. slow expln.

1. Accel. prodn?

a. We are dealing w. unitized fields. Earlier "Legal Hill Effect", rule of capture. only a bogey here.

b. Prodn. rates are controlled. i) by ~~res~~ resv. regs. ii) By pipeline capacity.

c. Add'l. faster prodn. raises PV +, true

i. If added wells are in true base, also includes them.

ii. If added wells are not in true base, at least they aren't deducted from it.

iii. Only if added wells are deducted from base, wd. faster prodn. fail to Δ PV.

Cite App. — of my rpt.

d. Faster prodn. wd. require more xpts. if there is bonus drng. add to true base. A tendency to Δ rate, ~~ad~~cd. ; be desirable. Doubtful if there is such tendency. But there is no opposite tendency (conv.)

e. Weight of other changes are on u.p. basis, not to slow prodn.

which makes this the best of Texas.

There are:

Severance tax, largest state tax on oil

Royalties

Fed. excise, or WPT

Fed. inc. tax (less cap. incr. on c.p. basis)

Pipeline tariffs in excess of MC

2. Discourage explr?

a. Leaves much discovery value, esply. for reserves w. the characteristic of oil & gas, rapid early recovery.

Erodes own base, espn. d/set, to ~~a 2 to 1 or 2 to 1~~.

~~does not reduce IV by 2 to 1 or 2 to 1~~ doubling t does not halve p.v.

Cf. Love, p. 15

Let $i = .15$

n $\vec{t}$ t

n \ t	.01	.025	.05	.10	.00
1	86.21	85.11	83.33	80.00	86.96
2	74.32	72.43	69.44	64.00	75.61
5	47.61	44.65	40.69	32.77	49.72
20	5.14	3.97	2.61	1.15	6.11

(Cf. Erickson, p. 17, 'lowers'?)

b. Front-loaded?

Not if exempt reserves before prodn.

But any front-loading is d/set by lower bonuses, which d/set damper 100%.

c. In present form, discourages post-leasing explr.

d. Cuts rate reduces explr.

C. Reliability of Revs.

1. Unit Values stable
   a. Revs. indep. of s.r. price swings
   b. " of capn. effect — cf. OGLPA
   ~~c. " indep. of swings in current output~~

2. ~~Physical~~ Volume of base stable
   a. Indep. of swings in current output
   b. Revs. lead output
   Even tho tax waits on comml. prodn., revenue on a going lease will be "proven" progressively ahead of prodn.
   But to the extent the tax leads ~~prodn~~ others will reduce bonuses (cost)

3. Just rent? No tax does. Cf. Erickson p. 13.

D. Thoroughness of extracting surplus
   a. Not too good when output is concd. up front. E.g., if all rent is due next year, this tax only gets a share of the Δ above discounted value.
   (But this leaves disc. value to reward discovery.)
   But we may assume ops. are aware that lower

so as to future, a toss-up. As to past, borrower already pd., helps state.

b. But it does focus on surplus quickly. It's just that it takes more from the more defined ones. Something else is needed for the ripe ones.

II. Problems

A. Choice of disc. rate.

1. Sensitivity to d.r. Cf. Love, p. 15

2. ~~Tendentious~~ ~~One-sided~~

Legislating a disc. rate:

a. Bkbs. influ. into d.r., but not into rev. forecasts, assrs. are reluctant to assume rising prices. Is inherently asymmetric to ~~the~~ look backwards (even)

b. One-sided appeal process. Tax payer may rebut; state can't. And at hi rate, only state wd. have a case.

c. Rate of 10% is hi above what prime borrowers pay for long term funds today.

Exxon 13% YTM. As low as U.S. Trsy, even tho ~~pr~~ inc. subject to state inc. tax.

Tokio 13.8%

~~Coca~~

aTT 13.8%

USTrsy 13% (and, free of ~~U.S.~~ state inc. tax)

Besides, internal funds available below mkt. Otherwise, firms wd. borrow more.

d. Error of factoring hi cost into i.

~~Re~~ Double counting.

for an infln. rate of $\frac{1}{4}$, $\frac{1}{4}$ fwds. for price. If infln.
sld, slow are stuck. If infln. sld, rise, cos. can
appeal, state can't.

d. SEC requires cos. use 10% d.v. re RRA. 17 CFR 210.3

B. Omitting gas

1. Wd. not ~~encts~~ discourage indy. to take risks from it. Depends on 'taxable event' – a needed concept.

a. Taxable event is not moving gas, but holding it.

b. Much gas already found.

c. Gas found as by-product of oil, little detriment on finding.

2. If res. tax is to take much rent, must begin early

3. No ~~windfall~~ WPT excise tax on gas – thus unpreempted

c. Excluding "unproven" tax.

1. "Proven" needs, more defn. Cd. be too restrictive. "Conventional usage of "proven" is highly restrictive, (over)

2. "Recoverable in the future under prevailing ec. conditions + tech." is ambiguous. Prevailing when? Now or then? Most likely rdg. is "now", bcs. ~~case~~ conditions then are spec. "unproven".

3. Suggested language: "under ec. conds. prevailing and ~~or~~ reasonably expected ~~ec. conds.~~" to prevail at time of prodn.

Excluding leases not having comml. prodn. Unnec. bcs:

1. Until lease abandoned, premium value - holder gains inc. tax dedn. by abandoning.

2. 1975-77 tax precedent not being followed.

3. Conceivably cd. be held an unreasonable classifn. A unprod. lease having comml. prodn.; taxed; a valuable one w/o same is exempt.

It ~~is actually that~~ ~~the~~ is close to "absolutely certain";
~~as opposed and~~ "highly likely" is not good enough,
even tho "highly likely" may have a hi
mkt. value.

Add # 31, p. 9.

Suggested language: "known or ~~probable~~ deposits.
Degrees of probability are to be ~~est~~ assigned by
~~valuation engrs~~ appraisers conversant w. the ~~best~~ current
state of the art, as used by buyers & sellers & lenders
~~setting~~ ~~current, at~~ values in the mkt."

D. Use of "open mkt" concept.

Hardly meets conditions of open mkt. — a few vert. int'g firms.

multinat.

E.g. Alcoa, cap. gains.

also. max. cost depln. by periodic sales

Absence of mkt. ~~is~~ is not fault of state, & shd. not be allowed to justify low valuations. Leases have, e.g., a preemptive value.

Might require, ~~as~~ as condition of protected assmt., a binding o/e to abandon lease to state for the asst of the protected assmt.

E. Unclear Def. of "net income" to be capd.

1. No defn. of net inc. given. Overlap w. Ch. 21 might lead to inj defn. there. But Ch. 21 allows ~~some~~ amn-s ~~deductn~~ of ~~too~~ lease acqn. cost. But this is surely intended to be in tax base.

Shd. say cash flow.

2. Valuation shd. consider all advantages a firm gets or cd. get from tax shelters. E.g. max. cost depln. by periodic sales.

3. Ch. 21 allows other extraordy. deductns., base very narrow.

4. Same time, Ch. 21 defn. too broad, by not allowing deductn. of Fed. taxes. Cd. lead to challenge, as a clearly wrong method of valuation — only grounds on which state prop. tax ~~is~~ ever overridden.

Ideas, etc

1. If cap. rate is hi, must inflate exotic prices. How are they? Not explicitly enough, p. 9
   They shd. presume that oil price will rise by GNP defl. rate, too.

2. Safety net tax.
   Res. tax cd. also be retained as permanent part.

3. Comment on oil co. arguments "in light of my top 500 corp." analysis.

4. Send vitae + clean bill re oil producers.

5. challenged law is C.S. 43.21
   ".21" = Ch. 21.

6. Effects on future Exp ~~+~~
   Dev.

7. Is res. tax on pure res., or also on dev. cap?
   Much cap. is intangible. Res. tax misses this, i.e. can be set higher.

8. 1975 Res. tax worked, w/o "ed. nightmare" + "huge rev. bureaucracy" as indy. accused. In effect 2 yrs.

9. Res. tax can take more than others, w/o hurting ful. incentives. bcs. it focuses on taxable surplus.

Tutor: points to indy. may be divided into ful. + non ful.

~~10.~~ Only practical limits on rate are

a. accel. prodn? (but also accel. bldg. pipeline etc.) (over)

b. slow explr?

c. Be illegal.? (altho no lawyer, compt. out factors not considered in discussions thus far.)

Outline. Consider these separately.

10. ~~Forecasting revs.~~ Reliability of revs.

Prop. tax ~~rates~~ ~~base~~ is

a. Values are stable — based on prices forecast yrs. ahead.

b. Indep. of current prodn.

c. Rate easily adjustable.

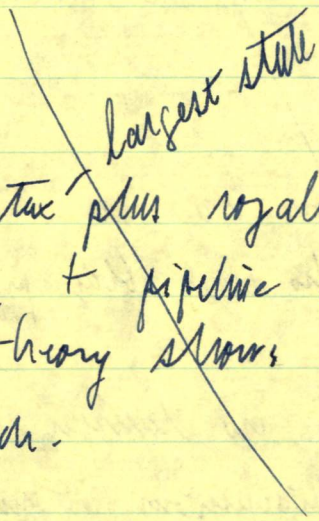
d. Sustains rev? cf. Erickson p. 13, ——

11. Timing of revs.

Cash comes in earlier. (altho reduces bonuses.)

9. c. Prop. tax least vulnerable legally

1. Jurisdn. clear, unambiguous. No shaving, apportionment.



severance tax plus royalties not to slow prodn.
State reg. + pipeline capac. cap prodn.
also, theory shows no tendency to accel. ~~above~~
very much.

of ch. 20 to "allow" or separate acctg of ch. 21, ak. showed desire to move this way.

Based on situs, in rem. Is going from "apportionment"

2. Longest history

3. Based on state sov. + common law No limit on state's power over r.e.; common law based on concept of underlying ownership of r.e. by sov. Issue of discr. vs. interstate ~~tax~~ is avoided – (over)

4. No preemption by fed. No compn. (over)

5. Many states + localities. very lit water.

6. Revival .. have classified rates, highest on extr. minerals.

7. No relation to benefits rec'd. need be shown.

12. Tax caps. ⊙ looked in Erickson p. 17

13. 1975-77 Ak. assrs. used 18% ~~disc~~ disc. rate. Now, 19% advocated.

14. Ak. taxes now take ca. 1/6 value of P.B. prodn.

15. PETREV forecasting model, opd. by Dep. of Rev. ~~Assn~~ assumes:

a. No real $ Price, world mkt.

b. 10% infln.

c. Risg well head price, as TAPS lowers Tariffs.

Many states even limit for. ownership.

As a direct tax, presumed not passed on to interstate commerce, no way can export tax.

Prop. value is paid at end of line, after fed. tax has been taken from inc. + windfall profit.

15 b. If price inflm. forecast at 10%. then 1990 $\underline{i}$ is too hi. If based on looking back at a higher inflm

Shd. use same future inflm. rate for both.

c. ~~E~~ Wellhead price oil per bbl.

1981 25.^{00}

1982 30.^{00} (and then?)

Wellhead price gas per MCF

Begin 1988 @ $1.^{00} "real" dollars. (1981 or 1988?)

7 16. Erickson based valuations on inc. before inc. taxes. p. 34.

17. What rate are prime borrowers paying for long term bonds today? ~~"current"~~ 13-14%.

~~Exxon 6s 99 @ 54.7/8~~

Next page.

Price	Firm	Coupon	Maturity	Yrs to Mat.	Δ Yields "Current"	YTM
57	Exxon	6 1/2	98	17	11.4	12.83
54 7/8	"	6	97	16	10.9	12.74
~~96 15/16~~	~~Arco~~	~~8.70~~	~~81~~	~~0~~	~~9.0~~	
89 1/8	"	8 3/8	83	2	9.4	
91	"	7 1/2	82	1	8.2	
76 1/8	"	7 3/4	86	5	10.2	? 16.37 !
59 3/4	Solvio	7.6	99	18	12.7	13.73
64 3/4	"	8 1/2	00	19	13.1	13.83
77	"	7 1/2	86	5	9.7	14.24
91	ATT	13 1/4	91	10	13.7	13.82

U.S. Tsy bonds

107.2	USTsy	13.875	May, 2006	25	12.943	~~12.84~~ ~~12.943~~ 12.899
103.2		15.75	May 1984	3		14.16
89.7		11.50	Nov. 1995			13.15

18. Costs of hostile env. of N. Slope are already entered in costs. To allow a higher i also is double counting.

19. Alk. corp. inc. tax rate = 9.4%

20. as titles of the propty. that yields the inc., Alk. clearly better off w. a tax based fully on the propty. than sales.

21. Corp. Tax has problem w. fed. tax on windfall profit Prop. base can be net of same, no issue.

Ch. 20 deducts "windfall profits tax" (a fed. excise.) Ch. 21 does not.

Fed. inc. tax pmts. are not ded. from gross inc. to calc. state tax (except in N.D.) But most fed. excises are.

22. Severance tax is deductible for windfall profits excise. Condon, p. 16.

23. No windfall tax on gas. Is it desirable to get it into tax base — env. advantage of reserves tax.

24. Oil indy. internal funds are available below mkt. rates. Otherwise, firms wd. borrow more.

25. Fed. bonds are free of state inc. tax, But:
States do not let indivs. deduct fed. taxes from taxable income.

26. Value as of 7/1 used for assmt + tax 7/1

27. Workdraft
a. p. 9 l. 7. "proven" reserves needs defn. Could be too restrictive

b. In an "open mkt", l. 11, a finder often sells lease for cap. gain. Absence of such maneuver suggests absence of active mkt.: might justify higher valuations.

c. l. 18, disc. "net income" shd. be replaced by cash flows, and/or the terms defined.
Corp. tax does not deduct fed. tax. A prop. valuation normally does. But a prop. valuation also factors in all the advantages a firm gets or can get from tax privileges. Or Cd. get in a free mkt.

In a free mkt, a firm wd. max. cost depln. by periodic sales.

"Net inc." cd. be construed to mean after depln. of hist. costs. (Cash flow domin.) But hist. cost is intended to be in the tax base — (cite reason for thinking so ..

)

Esp., net income defined in Ch. 21 is net of bonus amn-n., + more.

28. Ch. 21 allows extraordinary list of deductns, so base is very narrow. Res. Tax can have broader base.

29. Ad Val. Tax is Ch. 58, a.s. 43.58.021.

30. Def. of proven reserves, ambiguous.
"recoverable in the future under prevailing ~~eff~~ ec. conditions + tech." Prevailing when?

"having commerc. prodn." ? In progress, or having the capacity?

Alaska

6/3/81

8A

Bill passed out of comm.
Will pass House + Senate

Useful now:
1. Comments on bill, (informal).
2. Formal comments for Leg. Record

Bill thanm. 5 x $400 = 2,000

Take 2 days now. Mail by Mon. $800

authorized.
Use DHL Courier,

New bill, exempts rest. gas from assmt.
Disc. rate 19%, 11.6% + deflator, 5-yr. ave.
Permanent rate is 25 mills
150 yr. " " 30 "

Contact Merk if any gas.

Tony Gardner, Chair

31. The provision to exempt non-producing leaseholds is too generous. It also acts as a tax on going into prodn.

Non-producing leaseholds have a mkt. value, evidenced first by bonus bids. It is a probability or spec. value.

Not unique. Like floating value of suburban land.

Is reasonable presumption that probability attaches to lease until holder abandons. Holder gets Fed write-off when abandons.

Position of leaseholder is more advantageous than suburban landowner. Latter cannot shake floating value. Oil lessee can drill

32. Valuation of 7/1/00 used for tax due 6/30/01.

33. Res. tax criticized for front loading. But lowers bonuses.

The lowering of bonuses offsets damper on explor. 100 90!

34. Good arithmetic e.g. of res. tax in Lowe, p. 15

35 - assrs. are uncomfortable projecting Δp into future.
This, legn. as is counts hazard

36. SEC requires oil cos. use 10% disc. rate re RRA. 17 CFR 210.3

37. Ress. tax has only one legal weakness I see, that is its close tie w. corp. tax.
Shd. not try to raise same revs. from same firms. Stands on own feet.

38. Ap. of Rev. appraising practice:
a. Add 9% to prior yr's values, for infln.
b. Depres. new figure, assuming 25 yr. life of "field".
c. Add new capl. (does res. tax hit new cap?)

39. 19% was fixed on somewhere. When GNP deflator turned out to be 7.4%, they put in law they wd. add 11.6% to it. Amdmt 10 to SSHB 200.

40. $4r = \ln \frac{P_1}{P_5}$

$e^{4r} = \frac{P_1}{P_5}$ $\qquad P_5 e^{4r} = P_1$

Minor hazard: they used cont. int. to find infln. rate (over last 4 yrs). This gives a slightly lower rate than annual. Then they inflate the legislated addend to bring sum up to 19 %.

Later, they may forget how they arrived at the leg. addend of 11.6 %.

40A. Diff. ways of figuring rate of infln.

Year	Index No.	Annual infln.	Cumulative Rate
0	100	~~10%~~	
1	110	10 %	9.53
2	121		9.53
3	133		9.51
4	146		9.46
5	161		9.53
			~~9~~

Small deduction over book.

41. Rate. 25 mills.

42. Not ff. precedent of 1975-76 res. tax, which predated comm. prodn.

43. Discount rate shd. not be in law.

Taxpayer may rebut.

State cannot. And rate is so hi, only the state wd. want to.

44. Ch. 58 is res. tax.

45. "proven res." defn. too limiting. Shd say "under prevailing or reasonably expected ec. conditions & tech." See next p.

Defn. doesn't say how fast (or when they begin to) produce.

46. A. If, to avoid some res. tax, you speed up prodn., this raises PV of reserves, hence tax, & limits any gain.

If to speed prodn. you drill more wells, and these are taxed, you limit gain.

The new wells may also prove more reserves.

B. If, to avoid proving res., you avoid expl. wells, your lease runs out.

If you prove a min. amt. to retain lease, & avoid doing more —

a. Lease is too big

b. State shd. reserve rt. to enter & explore? It won't hurt owners -- in fact, lessees might prefer it, and this cd. be a fault.

c. Lessor has failed to limit running lease to the area w. proven res. State must do this in leases.

~~44.~~

45 (resumed) "Known or ~~highly~~ probable deposits, degrees of probability to be estd. ~~in the same way~~ using the ~~same~~ techniques of the state of the art."

47. ~~Value~~ Value is disc. net inc., but net inc. not defined.

48. Current prop. taxes list "Landscape" but not reserves.