APA Training: Cost Sharing

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Robert Weissler (these slides)
Russell Kwiat
Joseph Rosenthal
Dick Osborne
Topics

- What is cost sharing? (reg. 1.482-7)
- Ongoing cost shares (reg. 1.482-7)
- Buy-ins (regs. 1.482-1,4,5,6,7)
- Case studies
What Is Cost Sharing?

• Cost Sharing Arrangement (CSA)
• Qualified Cost Sharing Arrangement
Cost Sharing Arrangement

• Defined (reg. 1.482-7(a)) as an agreement to:
  – Develop intangibles
  – Assign interests in intangibles developed
  – Share costs in proportion to “reasonably anticipated benefits”
• No royalties for these intangibles
Cost Sharing Arrangement

• Can think of as joint venture
• Controlled and/or uncontrolled parties (uncontrolled seem rare)
• Develop technology and/or other intangibles
• Interests often divided by territory
Cost Sharing Arrangement

• One party may do all the work
• Reimbursement at cost (compare treatment of services under reg. 1.482-2(b))
A Qualified CSA Has Additional Requirements (reg. 1.482-7(b))

- Controlled parties must all expect to receive benefits
- Spell out cost share method
- Provide for adjustments to cost shares if circumstances change
A Qualified CSA Has Additional Requirements (reg. 1.482-7(b))

- Accounting consistency among controlled parties for costs, benefits, currency translation (-7(i))
- Contemporaneous documentation requirements (-7(b)(4),(j)(2))
- Reporting requirements (-7(j)(3))
Role of Qualified CSA

• For a qualified CSA, Service will adjust only the cost contributions, and only if needed to make cost shares reflect anticipated benefit shares (discussed later)

• No separate arm’s length requirement for cost shares or CSA structure
Role of Qualified CSA

• Service may treat non-qualified CSA as qualified CSA
• In cost sharing APAs, strive for qualified CSAs
Topics

• What is cost sharing? (reg. 1.482-7)
• Ongoing cost shares (reg. 1.482-7)
• Buy-ins (regs. 1.482-1,4,5,6,7)
• Case studies
Ongoing Cost Shares
(Reg. 1.482-7(d),(e),(f))

• Share costs in proportion to expected ("reasonably anticipated") benefits to each participant
  – Allocate a participant’s dual-use costs in proportion to reasonably anticipated benefits from CSA use and private use

• How to estimate shares of expected benefits

• What if estimates are wrong?
Estimating Expected Benefit Shares

- Most reliable method (ref. to -1(c)(2)(ii))
  - Completeness and accuracy of data
  - Soundness of assumptions
  - Sensitivity of estimate to particular deficiencies in data or assumptions

- Types of methods
  - Direct
  - Indirect
Direct Method

• “Estimated additional income to be generated or costs to be saved by the use of covered intangibles”

• Rare
Indirect Methods (Proxies)

- Unit sales
- Volume sales
- Operating profit
- “Other” – some possibilities:
  - Gross profit
  - Gross profit less selling expenses
  - Employees
Time Period for Estimating Benefits

• Are significant changes expected in benefit shares (however estimated) over time?
  – If yes, do present value calculation and apply to all years
  – If no, may do year-by-year calculation
Prospective Adjustment of Shares Based on Changed Circumstances

• Method (direct method or a particular proxy)
• Time period (change yearly to present value)
• Present value (new calculation)
Service’s Retroactive Adjustments to Cost Shares ("Cost Allocations")

- Wrong method
- Incorrect predictions
Wrong Method

• When benefit shares were estimated to split Year Y costs, was the most reliable method used, based on information available in Year Y?
  – If not, Service may adjust using most reliable method, based on information available in Year Y
Incorrect Present Value Predictions (Cf. -4(f))

• Redo present value calculations based on results through Year Z and revised predictions as of Year Z

• Can adjust if the revised share of any controlled participant is outside 80% - 120% of the original share
  – Usually lump foreign parties together

• But do not adjust if deviation due to unforeseen extraordinary events
Safety Valve? (-1(g)(5))

- If after cost allocations “a controlled participant bears costs . . . over a period of time . . . consistently and materially greater or lesser than its share of reasonably anticipated benefits,” Service may impute a transfer of interests requiring compensation based on current value
Reg. 1.482-7(g), Example (2)

• After development of manufacturing intangibles, Participant A ceased manufacturing and sourced product from Participant B, earning only routine distribution return

• Participant A deemed to have transferred its interest to Participant B
Topics

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• Case studies
What Is a Cost Sharing Buy-in?

• Payment to CSA party by other CSA parties for the use of intangibles developed or acquired outside the CSA

• Reg. 1.482-7(g)
  – Refers to Regs. 1.482-1,4,5,6 for valuing intangible transfer
  – Also discusses shifts in CSA shares
Example of Cost Sharing Buy-in

• U.S. Parent with intangibles forms CSA with new tax haven subsidiary to develop next-generation product
• U.S. Parent makes current generation technology available to CSA
Buy-in Topics

- Cross-cutting concepts (applicable to multiple methods)
- Particular methods of valuing the intangibles
Cross-cutting Concepts

- Forms of payment
- What intangibles are compensable?
- Typical positions of Service and taxpayers
- Useful life or lives
- Cost calculations
- Different philosophies
Forms of Payment

• Reg. 1.482-7(g)(7) gives choices:
  – Lump sum
  – Installment payments on lump sum, with arm’s length interest under reg. 1.482-2(a)
  – “Royalties or other payments contingent on the use of the intangible by the transferee”

• All subject to periodic adjustment under reg. 1.482-4(f)
Forms of Payment

• Who chooses?
  – Normally respect Taxpayer’s form
    • Penalties fairness
  – Can be negotiating point for APA
• Can convert between lump sum and royalties
TPMs’ Natural Payment Forms

<table>
<thead>
<tr>
<th>Lump Sum</th>
<th>Royalties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Capitalization</td>
<td>Residual Profit Split</td>
</tr>
<tr>
<td>Discounted Cash Flow</td>
<td>Declining Royalty</td>
</tr>
<tr>
<td>Capitalized Expenditures</td>
<td></td>
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</tbody>
</table>
What Intangibles are Compensable?

- Reg. 1.482-7(g) mandates buy-in payment for “intangible property”
- “Intangible” defined in reg. 1.482-4(b)
Intangible Definition in Reg. 1.482-4(b)

• “substantial value independent of the services of any individual”
• Commercially transferable (in preamble; left out of text as “superfluous”)
• Enumerated items (e.g., patents, know-how), plus similar items, defined as deriving value “not from its physical attributes but from its intellectual content or other intangible properties”
What Might Be Excluded?

• Workforce in place (probably excluded)
• Going concern (probably excluded)
• Goodwill?
• Other?
Typical Positions of Service and Taxpayers

• Typical case is outbound: technology donated out of US, buy-in payment comes into US

• For outbound cases, taxpayers typically want small buy-in payment
Useful Life or Lives of Donated Intangibles

- Need for most TPMs
- Often a key issue
- Shorter useful life usually means smaller buy-in payment
- If convert lump sum to a royalty stream, shorter useful life means quicker payments
Cost Calculations

- Some TPMs rely on costs of developing intangibles
- Issues:
  - Capitalization and amortization
  - R&D weighting
Capitalization and Amortization

• Capitalization: expenditures contribute to lasting asset
• Capitalization: growth in value over time by some discount rate?
• Amortization: asset declines in value over its useful life
  – Choice of schedule
  – Gestation period
Capitalization and Amortization

• Different Technical Choices, such as:
  – Assume spending done at certain times (e.g., mid-year, or split between year start and year end)
  – Calculate values at start and end of year and then average, or calculate average directly

• Some choices are fine, some not. Get economist’s help
R&D Weighting

• Service sometimes argues that earlier (pre-buy-in) R&D should be weighted more heavily because:
  – More pathbreaking (greater value)
  – More risky because earlier stage (one successful project hides nine failures)
APA Program’s Experience with Methods to Value the Donated Intangibles

• Specified methods are often inadequate
• Some useful unspecified methods draw on elements of specified methods
Specified Methods

- CUT: especially hard to find
  - Might have acquisition study
- CPM: no simple party
- Profit split:
  - Comparable profit split: especially hard to find
  - Residual profit split: can apply
Some Methods for Valuing the Contributed Intangibles

- Market Capitalization
- Discounted Cash Flow
- Residual profit split
- Declining Royalty
- Capitalized Expenditures
Convention

- For simplicity, assume just two parties
- D is the party that donates the technology to the CSA
- R is the other party
Convention

- D’s share of expected benefits is d
- R’s share of expected benefits is r
- So d + r = 1
- V is value of intangibles donated to CSA
- So V * r is buy-in amount (next slide)
Example of Buy-in Share

• Suppose D donates technology worth $10M to the CSA
• Suppose R has 40% share of expected benefits ($r = 40\%$)
• Then the buy-in payment is $10M \times 40\%$, or $4M$
$10M Technology
Donated by D

60% share

$6M
Benefits D

40% share

$4M
Benefits R
Market Capitalization

• V is D’s stock price minus the value of D’s:
  – Tangible property
  – Non-covered intangibles (e.g., workforce in place, routine intangibles, intangibles in unrelated areas)
• So V * r equals lump sum buy-in
Market Capitalization Philosophy

• Like CUT (add control premium?)

• Arm’s length deal for opportunity
  – Hypothetical: If present value of expected worldwide profit from these intangibles is $1B, what should buy-in be for half of the worldwide interest?

• Extracts all of R’s expected profit from these intangibles
Market Capitalization Criticism

• Stock price volatile
• Stock price unreliable

• Hard to value what to exclude
Discounted Cash Flow

• Project R’s expected profit from these intangibles for each year:
  – Revenues
  – Minus expenses
  – Minus routine profit (use CPM)
  – Minus profit from other intangibles

• Use discount rate to get present value
Discounted Cash Flow
Philosophy/Issues

• Similar to market capitalization:
  – Extracts all of R’s expected profit from these intangibles
  – Pay for opportunity ($1B hypothetical)

• Projections may be difficult
Residual Profit Split (RPS)

- CPM for R’s routine profit
- Split R’s residual profit each year according to shares of intangible stocks
Residual Profit Split
Philosophy/Issues

• Does not extract all of R’s expected nonroutine profit
  – R might quickly achieve the lion’s share
• Pays for past work but not opportunity to continue R&D
Residual Profit Split Example: Assumptions

- $r = 0.4$
- Same expenditures each year
- Buy-in at end of year 2
- Evaluate shares for year 4
- 4-year useful life
- All work done mid-year, instantly in service
<table>
<thead>
<tr>
<th>Year</th>
<th>D’s expenses</th>
<th>D * r</th>
<th>As of Year 4</th>
<th>R’s expenses</th>
<th>As of Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>4</td>
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<td>6</td>
<td></td>
<td></td>
<td>4</td>
<td>1.875</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td>3</td>
<td>(34%)</td>
<td>5.875</td>
<td>(66%)</td>
</tr>
</tbody>
</table>
Declining Royalty (DR)

- Determine initial royalty
  - CUT; or
  - CPM to get R’s routine profit
- Decline royalty over time
  - Fixed schedule; or
  - By intangible stock ratio
RPS and DR Compared

- Both do **not** extract all of R’s expected profit from these intangibles
- Both pay for past work but not future opportunity
- RPS: declining share of R’s yearly residual profit
- DR: declining share of initial royalty
Issues in Calculation of Initial Royalty Using CUT

• Arguably adjust comparables down because no update rights
• Arguably adjust comparables up because more than just right to use
Capitalized Expenditures ("Capitalized R&D")

• Capitalize and amortize expenditures to date
• Generally gives too low a result; can be useful benchmark
• Refinements using comparables’ ratios of intangible value to capitalized and amortized expenditures
Factual Considerations for Choosing Method

• How much of D is being contributed?
• Long term or short term rights?
  – Form v. substance
• Availability of data
• Other?
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Buy-in Case Study

- U.S. Parent (D) was an established worldwide vendor of software
- D licensed two products to affiliates and unrelated parties:
  - G1 first generation
  - G2 second generation
Buy-in Case Study

• D entered CSA with affiliate R in low-tax jurisdiction for further development of G2
• R continued paying royalties for G1
Taxpayer’s Proposed Buy-in
TPM: RPS

• Split R’s profits between G1 and G2 based on new license revenues
• G1 residual profit goes all to D
• G2 residual profit get split by intangible stocks. Cost base:
  – Left out stock options and technology acquisitions
  – Counted R&D not yet in service
Taxpayer’s Proposed Buy-in
TPM: RPS

• Three-year useful life
  – No profits in first year
  – Acquisition study used ten year life

• Used last quarter of each year to determine intangible stock ratio for the year (inadvertent mistake?)
Results (Present Value)

- G2 buy-in $7M
- G1 royalties $5M
- Total $12M

- Capitalized Expenses $20M (R’s share)
Software Useful Life Considerations

• Product life v. technology life
• Lines of code replaced
• Program architecture and interfaces
• Development tools

• Key is not what is added but what is kept/discarded
R&D Weighting

- Service suggested: pioneering R&D to become player, more routine R&D to stay a player
- Taxpayer said: pioneering R&D all the time to stay a player, and recent R&D produces major selling points
Installed Customer Base Issue

- Service suggested buy-in for installed customer base
- Only fixed amount of residual profit to split; assigning some to installed customer base didn’t make much difference
Service’s Proposals

• Market Capitalization
  – Careful use of comparables to take out nontransferred intangibles

• CUT
  – Originally, Service thought of CUT with declining royalty
  – Service actually proposed discounted cash flow method where CUT established initial royalty rate
End of Presentation

• Remarks by other speakers, including additional case studies