# APA Training: Cost Sharing

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# 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

- 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 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

| **Lump Sum** | **Royalties** |
|---|---|
| Market Capitalization | Residual Profit Split |
| Discounted Cash Flow | Declining Royalty |
| Capitalized Expenditures | |

# 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

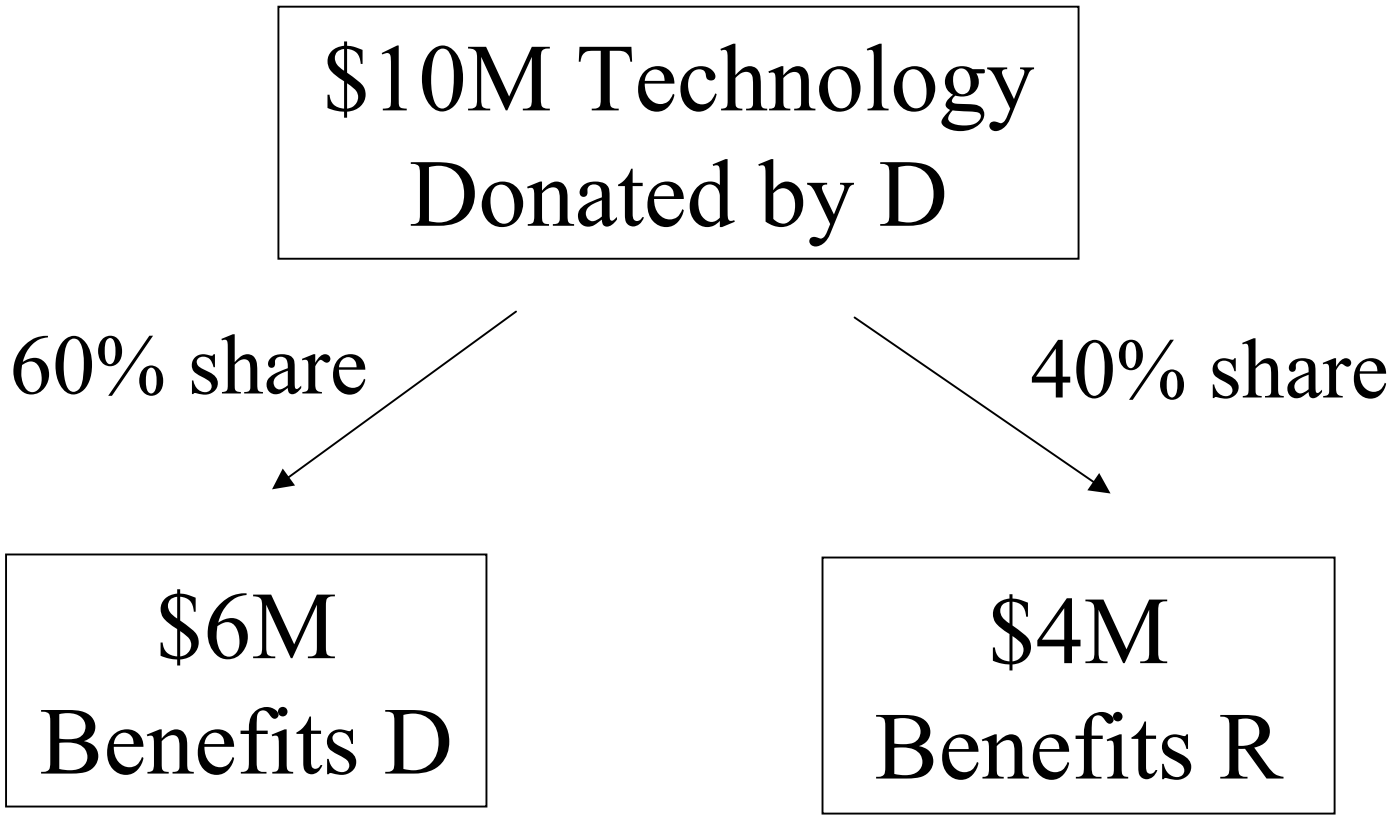
- For simplicity, assume just two parties
- D is the party that donates the technology to the CSA
- R is the other party

# 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
40% share
$6M Benefits D
$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

| Year | D's ex-penses | D * r | As of Year 4 | R's ex-penses | As of Year 4 |
|---|---|---|---|---|---|
| 1 | 10 | 4 | 1 | | |
| 2 | 10 | 4 | 2 | | |
| 3 | 6 | | | 4 | 3 |
| 4 | 6 | | | 4 | 1.875 |
| total | | | 3 (34%) | | 5.875 (66%) |

# 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?

# Topics

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- **Case studies**

# 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