Suder v. Commissioner: The Swiss Army Knife for your Research Credit Claims

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The Dilemma

Management Expects that Your Company Will Get a Research Credit

- The existence of the research credit is regularly discussed in the press.
- Your company constantly needs to develop new products or improve old ones.
- To that end, your company employs scientists and engineers to work on these projects.
- Each year, substantial sums are spent on these endeavors.

Statutory Requirements Appear Straightforward

- The expenditures are research and development costs "in the experimental or laboratory sense" (Section 174 test);
- The research must be undertaken to discover technological information (Technological Information Test);
- The costs are "intended to be useful in the development of a new or improved business component of the taxpayer" (Business Component Test); and
- "Substantially all" of the research and experimentation activities "constitute elements of a process of experimentation" (Process of Experimentation Test).

Regulations Appear to Add Clarity

• Treas. Reg. § 1.174-2(a):

"Expenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would *eliminate uncertainty* concerning the development or improvement of a product. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product *or the appropriate design of the product.*" (Emphasis added).

Regulations Appear to Add Clarity

- Information is technological in nature if the process of experimentation fundamentally relies on the principles of the physical or biological sciences, engineering, or computer science. Treas. Reg. § 1.42-4(a)(4).
- A process of experimentation is a process "designed to evaluate one or more alternatives" where the capability or methods of achieving a certain result are uncertain. Treas. Reg. § 1.41-4(a)(5)(i).

But What Do You Do If Your Exam Team Does Not View the Application As Clear?

A Flexible New Tool

- Case law on the research credit is relatively sparse and tends to focus on specific legal questions.
- However, on October 1, 2014, the Tax Court issued a decision in *Suder v. Commissioner*, T.C. Memo. 2014-201, 108 T.C.M. 355, involving the section 41 research credit.

A Flexible New Tool

- *Suder* provides a detailed, thoughtful analysis of the taxpayer's research process and how to assess its research activities in the context of the requirements of section 41.
- *Suder* does not break new ground.
- Rather, the value of *Suder* is that it provides a framework that enables you to bridge the statute and regulations to many specific challenges that are commonly raised by Exam and Appeals.

Suder v. Commissioner

Suder v. Commissioner—The Facts

- In Suder, the Tax Court considered whether certain wages, supplies, and contract costs incurred by Estech Systems, Inc. ("ESI") in tax years 2004 through 2007 were appropriately claimed by the taxpayer as qualified research expenditures under section 41.
- ESI was started by Eric Suder in 1987 out of his garage.
- Mr. Suder saw an opportunity in developing telephone systems for small hotels that offered features previously available only in higher-cost systems.
- By 2004, the company employed approximately 125 employees, had a team of 40 engineers and generated revenue of approximately \$38.5 million.

Suder v. Commissioner—The Facts

- As part of the ISO-9000 certification process in 2000, ESI created a "systematic product development process" that the company used to design new phone systems. *Suder*, 108 T.C.M. at 356.
- This process began with high-level product strategy meetings attended by ESI's senior executives.
 - The purpose of these meetings was to "cultivate new ideas and assess their feasibility at the macro level." *Id.*
- ESI's engineers then designed the initial specifications, tested the initial design, and produced a physical prototype.

Suder v. Commissioner—The Facts

- Prototypes were sent to ESI's product assurance lab where the design was analyzed and tested and any technical bugs were identified and fixed.
- The new device was then alpha tested by ESI's engineers and executives.
- Finally, new devices were put through beta testing which involved providing ESI's customers with a prototype of a new device at a discount in exchange for the customer's feedback on its design and performance.

Suder v. Commissioner—Calculating QREs

- ESI's calculation of its R&D credit was based initially on a study performed by a third-party tax advisor.
 - ESI's tax advisor prepared a spreadsheet listing all ESI employees who performed qualified research and estimated the time each spent performing qualified services.
 - The firm studied the roles and responsibilities of each employee and consulted with senior management.
 - At the conclusion of the study, the firm provided a report to ESI that included an overview of the study and the research credit, an analysis of ESI's research process, and a detailed calculation of ESI's research tax credit.

Suder v. Commissioner—Calculating QREs

- ESI's Senior VP of Product Development, Mr. Wende, directly participated in the initial R&D study. Thereafter, Mr. Wende independently prepared the study.
- During the years at issue, Mr. Wende prepared a spreadsheet listing each employee that performed qualified research and the wage allocation percentage that was used to estimate the QREs.
- In determining the allocation percentages, Mr. Wende consulted the R&D study as well as previous years' allocations as a starting point and made any necessary adjustments.

Winning the Battle; Losing the War

- Judge Vasquez found that the taxpayer's activities in eleven of the twelve product development projects selected by the parties as representative samples were qualified research activities under section 41 and that the taxpayer had adequately substantiated the QREs claimed. *Id.* at 366, 368.
- However, Judge Vasquez also decided that approximately 20% of the compensation paid to Mr. Suder—who owned 90% of ESI was reasonable compensation for his technical expertise. *Id.* at 371.
- While the reasonableness of compensation will generally not be an issue in widely held companies, this portion of the decision likely makes the decision a pyrrhic victory for Mr. Suder.

Common Issues Faced During Exam



The New Product or Improvement is Not Innovative

Problem #1

- Product development is often evolutionary rather than revolutionary, with the result that the IRS does not see the activity as sufficiently innovative to warrant allowing the credit.
 - Only a "simple enhancement" to an existing product.
 - No technical uncertainty.
 - Only bundling of existing products into an integrated whole.
 - Minor tweaks to existing products.

- In *Suder,* the IRS argued that many of ESI's product development projects were "routine" and that many of the new products were simply "repackaging and rearranging of earlier designs." *Id.* at 363.
- The IRS's expert took issue with the company's business model more generally, claiming that "ESI's strength is building low-cost, easy-to-use telephone systems that match products introduced by industry leaders. . . ." *Id.*

• But as the Court demonstrates, ESI was clearly in the business of making incremental product improvements. *Id.* at 364.

Project	Uncertainty
Arcadia	Adding ACD reporting to ESI's phone systems
Chameleon	Incorporating a third party skinning tool
Clark Kent	Extracting statistical information from Pink Panther
Rio Grande	Creating an application in Microsoft's .NET framework to
	program an ESI phone system
Mad Max	Transferring phone calls through hotel routers and firewalls
Express FSII	Adding new features such as live ring call waiting and ACD auto
	wrap
Suzuki	Creating wireless telephone interface cards
Phoenix	Connecting two cabinets; adding a backplane; integrating a
	ColdFire 5407 processor
Pony	Developing a 50 port phone system running Linux
DLCO	Isolating power; terminating traces
DLC82	Maintaining signal integrity on a small circuit board
IVC1212	Switching to 3.3 volt parts; surface mounting parts

- The Court found that improvements such as . . .
 - Enhanced customization;
 - Multi-tasking features;
 - New software applications; and
 - Bigger and improved hardware components
- Still presented ESI with numerous technical uncertainties.
- Suder provides a ready answer to efforts to disqualify everyday product improvement expenses.

- The fact that each of ESI's new products began as an initial concept and was vetted by senior management and subjected to multiple rounds of testing and analysis was evidence that ESI did not have all the necessary information at the outset to determine the appropriate method of developing the new product or its ultimate design.
- While the fact that a taxpayer had to undertake months or years of work to develop a product should always have been convincing that the design was uncertain at the outset, now you can point to *Suder* if the agent balks.



Routine Engineering Activity is Not Qualified Research

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Problem #2

- The IRS challenges QREs that it claims are "routine" or "basic" research activities that do not meet the requirements of section 41.
- Common examples:
 - Bug testing new designs.
 - Standard engineering techniques.

• In *Suder,* the IRS relied in part on the theory that ESI "chose among design alternatives by applying engineering know-how, publicly available knowledge, or by committee" and that these methods are not part of a process of experimentation. *Id.* at 364-65.

- The Court dismissed these arguments and found that the IRS failed to identify any "persuasive distinction between principles of engineering . . . and engineering 'know-how'." *Id.* at 365.
- The Court explained that many of ESI's engineers had prior experience in engineering departments at other well-respected companies and brought with them a "great deal of knowledge" of sound engineering principles that they used in designing new products at ESI. *Id.*

- It is significant that the Court explicitly referred to the ISO-9000 certification process and explained that those widely-accepted standards influenced the development of ESI's research process.
 - Suder accepted the taxpayer's use of known techniques to resolve design uncertainty.



The IRS Disallows QREs Claimed by Certain Departments

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Problem #3

- Sometimes the IRS accepts that some qualifying research was performed but disallows QREs claimed for expenditures incurred by particular cost centers, arguing that the activity within the four walls of that cost center does not meet the four-part test.
- In doing so, the IRS often raises one of two arguments related to a specific disallowed cost center:
 - When viewed in isolation, the activities of the particular cost center are not qualified research; or
 - The activities performed by the cost center occur either before research activities begin or after all design uncertainties have been eliminated.

- *Suder* provides a helpful response to the "isolation" issue by establishing that the proper analysis is (1) whether the taxpayer has a process of experimentation that satisfies section 41 and (2) what are the necessary steps of that process.
- The Court endorsed ESI's process of experimentation which relied on fundamental scientific methods:
 - "ESI had in place a very detailed, multi-level, systematic process for development of all facets of its phone systems which involved 1) conceptually hypothesizing how numerous technical alternatives might be used to develop new and improved phone systems, 2) testing these alternatives in a scientific manner, 3) analyzing the results, 4) refining the initial hypothesis or discarding it for another if necessary, and 5) repeating the same, if necessary." Id. at 365. MAYER * BROWN

- Rather than focusing on whether individual activities were qualified research, the Court recognized that the entirety of ESI's systematic development process was the process of experimentation and that each step in that process was a qualified activity.
- In particular, the Court makes clear that ESI's systematic testing of prototypes was a necessary part of its research process.
 - Testing hardware components with oscillators and volt meters;
 - Testing segments of software code with logic analyzers;
 - Regression testing to identify design defects; and
 - Alpha and Beta testing.

- *Suder* also offers ammunition in response to the attack that activities occurred outside the confines of a research process by helping to define when that process begins and ends.
- The Court recognized that the process begins with a product strategy or product concept phase.
 - "The process began with senior product strategy meetings . . .
 ESI's senior management, comprising of Mr. Suder, Mr. Boyd, Mr.
 Wende, and Mr. Hansen, attended the meetings. The purpose of the meetings was to *cultivate new ideas* and assess their feasibility at the macro level." *Id.* at 356 (emphasis added).

- *Suder* also confirms that the research process is not complete until *all* design uncertainties are eliminated.
 - The Court notes that "ESI's engineers continued to fix bugs in the product during the beta testing process" *Id.* at 357.
 - Though ESI's products were ready for evaluation by customers at the beta testing stage, the Court includes this step as a necessary part of the overall research process.



Managers or Executives are Not Performing Direct Research or Direct Support of Research
Problem #4

- The IRS challenges QREs claimed for activities of senior managers or executives.
- There are two common arguments that the IRS will make in challenging these expenditures:
 - Executives and senior managers function at a level too far removed from front-line research activities; or
 - Direct supervision covers only individuals who are supervising those that are directly conducting the research.

- The Court accepted the following wage allocations for ESI executives:
 - 75% for the CEO, Mr. Suder.
 - 25% for the COO, Mr. Boyd.
 - 100% for the Senior VP of Product Development, Mr. Wende.
 - 100% for the CTO, Mr. Hansen.

Id. at 360.

- *Suder* clarifies that while executives may have certain high-level managerial responsibilities, they may nevertheless be directly involved in the R&D process.
- In Suder, the Court explains in depth the role that ESI's senior executives had in the company's research process, enabling you to explain how your executives also qualify.

- The Court explained the role of Mr. Wende, ESI's Senior VP of Product Development:
 - "His functional role in both positions was to lead the product development teams at ESI, including the engineering groups, the product assurance lab, and the test technicians." *Id.* at 356.
 - Though Mr. Wende's role was to supervise the engineering groups, the product assurance lab, and the test technicians, he did not act as a high-level supervisor. He spent his time "'down in the trenches', interacting with employees regularly, giving them guidance, receiving their feedback, answering questions, and the like." *Id.* at 360.

- The Court explained the role of Mr. Hansen, ESI's Chief Technology Officer:
 - "His job was to design the architecture of new products. This included researching new technologies, deciding which technologies to incorporate into ESI's products, selecting appropriate electronic components, and writing high-level concept diagrams" Id. at 356.
 - Mr. Hansen was named as an inventor on several patents developed by ESI.

- The prior discussion of what constitutes the process of experimentation also makes it easier to qualify the executives' activities as direct research.
- The Court described the role of ESI's Chief Executive Officer, Mr. Suder, who was instrumental in developing concepts for new products:
 - Mr. Suder "spent much of his time steering product development at ESI from the idea generation stage all the way through alpha testing." *Id.* at 360.

- The Court also emphasized the importance of the administrative oversight provided by ESI's executives in the research process.
 - "Senior management assigned a product manager to the new product. The product manager worked closely with Mr. Wende and ESI's engineers to draft specifications for the new product. Senior management remained very involved in this process and provided feedback to the product managers along the way." *Id.* at 356.
- The Court's analysis suggests that managing and overseeing the tests and analysis performed by product engineers is just as important as the tests themselves.



Employee Surveys Are Not an Acceptable Method of Estimating and Substantiating QREs

Problem #5

- The IRS challenges the methods by which the company estimates QREs and documents the qualifying activities of employees.
- Though surveys are commonly used by taxpayers to estimate QREs for wages, Exam teams frequently take issue with that method, arguing that
 - The surveys are not evidence; and
 - The surveys are unreliable.

- Judge Vasquez endorsed ESI's use of a survey method to estimate its QREs.
- Suder demonstrates that the bar for understanding what constitutes qualified research is not as high as some agents demand.
- Despite Mr. Wende having had no formal training in tax law, the Court found that he was able to make accurate wage allocations based on his participation in the R&D study conducted by ESI's tax advisor.
- The methods many companies use to train the survey respondents will compare favorably to the experience of Mr. Wende.



What about *Shami v. Commissioner* which involved the activities of the taxpayer's CEO and another high-level executive?

Problem #5 Response—Shami

- The IRS cited *Shami v. Commissioner*, 741 F.3d 560 (5th Cir. 2014), *aff'g in part, vacating in part, and remanding*, T.C. Memo. 2012-78. *Id.* at 367.
- At issue in *Shami* was whether wages paid to two high-level senior executives qualified as research expenditures.
- These executives had no training in science or engineering and appeared to have mostly non-research, business management responsibilities.
- The taxpayer in *Shami* offered no evidence in support of the executives' research activity other than trial testimony, which the Tax Court found to be "self-serving and unreliable." *Shami* slip. op. at 9.

Problem #5 Response—Shami

- The Court in *Shami* found that the taxpayer failed to prove that the two executives were engaged in *any* qualifying research.
- In upholding the Tax Court's finding, the Fifth Circuit applied the *Cohan* rule:
 - "Cohan did not compel the Tax Court to make an estimate in this case. As the preceding discussion makes clear, the *Cohan* rule is not implicated unless the taxpayer can prove that he is entitled to some amount of tax benefit. In the context of the § 41 credit, a taxpayer would do so by proving that its employee performed some qualified services." 741 F.3d at 568.

Problem #5 Response—Shami

- Judge Vasquez rejected the IRS's comparison to *Shami. Suder*, 108 T.C.M. at 367.
- Unlike *Shami*, the Court in *Suder* found the testimony provided by Mr. Wende and other ESI executives and employees to be credible and reliable.
 - The witnesses were able to testify "in great detail" as to their involvement in ESI's product development process. *Id.*

Conclusion

- While Suder does not change the landscape of the section 41 research credit, it does serve as an effective new tool for taxpayers.
- Unlike prior case law involving the section 41 research credit, Suder includes a detailed factual analysis of the taxpayer's research process and how that process meets the requirements of section 41.
- Taxpayers can make effective comparisons to ESI's research activities in forming responses to questions often raised by Exam and Appeals.