

**PUBLIC POLICY REGARDING INDUSTRY-SPONSORED RESEARCH  
AT U.S. UNIVERSITIES**

*Report Prepared by UIDP Revenue Procedure 2007-47 Working Group Subcommittee  
("Working Group Subcommittee")*

**INTRODUCTION**

There is broad consensus among university and industry representatives that industry-sponsored<sup>1</sup> research is critical for the progress of science, the education of future generations of scientists and engineers, and the advancement of the health, safety, and economic prosperity of U.S. citizens. There is disagreement, however, on the appropriate public policy to guide industry-sponsored research in the United States. The focus of this disagreement is on a technical, but very important, question: should U.S. universities be allowed to grant corporate research sponsors rights in the resulting intellectual property at the time the sponsored research agreement is signed, if the research is conducted in facilities built with tax-exempt bonds?

There is no disagreement among university and industry representatives that the ownership of intellectual property resulting from industry-sponsored research should reside with universities, if the intellectual property is created by university faculty or students, or with the use of university facilities. Nor is there disagreement among university and industry representatives that universities should be free to refuse to grant rights in intellectual property resulting from industry-sponsored research if they choose to do so.

This report discusses two different interpretations of the "public interest" regarding industry-sponsored research set forth in U.S. tax law, the arguments for and against adopting one of these interpretations of the "public interest," and a set of principles that might form the basis for a consensus definition of the "public interest" for industry-sponsored research. This report does not consider whether any changes in the current law should be implemented through federal legislation, or through Internal Revenue rulings or procedures.

**BRIEF OVERVIEW OF IRS REVENUE PROCEDURE 2007-47 AND IRS REVENUE RULING 76-296**

One interpretation of the "public interest" is contained in IRS Revenue Procedure 2007-47 ("Rev. Proc. 2007-47"). Rev. Proc. 2007-47 provides that corporate-sponsored research using tax-exempt bond facilities will be considered a "private business use" of those facilities and, therefore, inconsistent with the "public interest" if the corporate sponsor is granted any rights in the resulting intellectual property at the commencement of the research project.<sup>2</sup> Rev. Proc. 2007-47 was preceded by IRS Revenue Procedure 97-14 ("Rev. Proc. 97-14"), which contained the same limitation on granting rights in resulting intellectual property to corporate sponsors at the commencement of sponsored research projects.<sup>3</sup> Rev. Proc. 97-14 was based on language in

---

<sup>1</sup> Industry-sponsored research and corporate-sponsored research will be used interchangeably.

<sup>2</sup> IRS Rev. Proc. 2007-47, § 6.02. A research agreement that is considered a "private business use" of tax-exempt bond facilities could result in the loss of the tax exemption for the bond income. IRS Rev. Proc. 2007-47, § 1.

<sup>3</sup> IRS Rev. Proc. 97-14, § 5.02.

the House Ways and Means Committee Report on the Tax Reform Act of 1986 ("1986 Tax Act"),<sup>4</sup> which stated that use of tax-exempt bond facilities in performing corporate-sponsored research would not be in the "public interest" if the amount charged to the corporate-sponsor for the use of resulting intellectual property is determined at the commencement of the sponsored research project.<sup>5</sup>

Another, and very different, interpretation of the "public interest" is contained in IRS Revenue Ruling 76-296 ("Rev. Rul. 76-296"). Rev. Rul. 76-296 provides that corporate-sponsored "scientific research" will be considered to be in the "public interest" if the research results are published and available to the public.<sup>6</sup> Rev. Rul. 76-296 also states that the relevant Income Tax Regulations regarding corporate-sponsored research "explicitly provide that [scientific] research will be regarded as carried on in the public interest even though such research is performed pursuant to a contract or agreement under which the sponsor or sponsors of the research have rights to obtain ownership or control of any patents, copyrights, processes, or formulae resulting from such research."<sup>7</sup>

Rev. Rul. 76-296 was not repealed by Rev. Proc. 2007-47 and continues to be valid law. A Congressional committee report prepared for the Senate Committee on Finance by the Staff of the Joint Committee on Taxation, dated December 4, 2006, cited Rev. Rul. 76-296 as the controlling authority on the definition of the "public interest" in corporate-sponsored research where the corporate sponsor has a right to ownership or control of intellectual property resulting from the research.<sup>8</sup> Rev. Rul. 76-296 was also cited as the controlling authority on the definition of the "public interest" under Income Tax Regulations § 1.501(c)(3)-1(d)(5)(iii) in an internal IRS continuing education paper published in 1999 focusing on intellectual property in tax-exempt organizations.<sup>9</sup>

Rev. Proc. 2007-47 and Rev. Rul. 76-296 are directed at two different situations. Rev. Proc. 2007-47 is concerned with the use of tax-exempt bond facilities for the conduct of corporate-sponsored research and Rev. Rul. 76-296 is concerned with the taxation of income received from corporate-sponsored research as unrelated business income. It is not clear, however, why these two different, but highly related, situations warrant such disparate definitions of the "public interest." Why are corporate sponsor rights in intellectual property resulting from the research consistent with the "public interest" when the research is performed in privately financed facilities and inconsistent with the "public interest" when the identical research is conducted in tax-exempt bond financed facilities?

---

<sup>4</sup> P.L. 99-514 (1986).

<sup>5</sup> H.R. Conf. Rep. No. 99-841, II-685-II-689 (1986).

<sup>6</sup> IRS Rev. Rul. 76-296.

<sup>7</sup> Income Tax Regulations, § 1.501(c)(3)-1(d)(5)(iii). A research agreement that is not deemed to be in the "public interest" could result in the imposition of an unrelated business income tax on the non-profit organization and, potentially, the loss of the organization's tax-exempt status.

<sup>8</sup> *Present Law and Background Relating to Tax Exemptions and Incentives for Higher Education*, prepared by the Staff of the Joint Committee on Taxation (December 4, 2006).

<sup>9</sup> R. Darling and M. Friedlander, *Intellectual Property*, 1999 EO CPE Text <<http://www.irs.treas.gov/pub/irs-tege/eotopic99.pdf>>.

A more detailed discussion of Rev. Proc. 2007-47 and Rev. Rul. 76-296 is provided in Appendix A.

**THE ARGUMENTS FOR AND AGAINST ADOPTING THE DEFINITION OF "PUBLIC INTEREST"  
IN REVENUE PROCEDURE 2007-47**

*Arguments For Adopting the Definition of "Public Interest" in Rev. Proc. 2007-47*

The arguments for adopting the definition of the "public interest" in Rev. Proc. 2007-47 have been advanced by some, but by no means all, university representatives. These arguments are the following:

1. Rev. Proc. 2007-47 is not a barrier to university-and-industry-sponsored research collaboration.
2. Rev. Proc. 2007-47 protects the academic integrity of university research.
3. Rev. Proc. 2007-47 protects universities from inappropriate corporate influence.
4. Rev. Proc. 2007-47 recognizes that it is not possible to value intellectual property rights prior to the time the intellectual property is created.
5. Rev. Proc. 2007-47 rightly allows universities to obtain higher royalties when the resulting intellectual property has higher value.
6. Rev. Proc. 2007-47 allows universities to grant corporate sponsors options to negotiate future licenses to resulting intellectual property.
7. Rev. Proc. 2007-47 allows universities to grant corporate sponsors licenses without price terms.
8. Rev. Proc. 2007-47 allows universities to grant corporate sponsors "private business use" of tax-exempt bond facilities up to either 5% or 10% of the amount of the bond proceeds.

*Arguments Against Adopting the Definition of "Public Interest" in Rev. Proc. 2007-47*

Among industry representatives, there is near unanimous opposition to adopting the definition of the "public interest" in Rev. Proc. 2007-47. The arguments made by industry in opposition to the "public interest" definition in Rev. Proc. 2007-47 are the following:

1. Rev. Proc. 2007-47 retards U.S. domestic economic development and threatens U.S. international competitiveness.
2. Rev. Proc. 2007-47 is driving U.S. industry to increasingly invest in research at foreign universities.
3. Rev. Proc. 2007-47 is inconsistent with the Bayh-Dole Act.
4. Rev. Proc. 2007-47 is in conflict with the Small Business Technology Transfer Program ("STTR").
5. Rev. Proc. 2007-47 can operate to force corporate research sponsors to subsidize their competitors' research.

6. Rev. Proc. 2007-47 denies sponsors and universities the flexibility to negotiate agreements at the commencement of research projects that advance the unique needs and interests of universities and sponsors.
7. Rev. Proc. 2007-47 limits the educational benefits and career opportunities that sponsored research can provide students.
8. Rev. Proc. 2007-47 makes it very difficult for corporate sponsors to budget the cost of developing new technologies at the outset of a research project.
9. Rev. Proc. 2007-47 is anticompetitive in that it does not allow universities to independently negotiate the terms and conditions of sponsored research agreements.

A discussion of the arguments for and against adopting the definition of "public interest" in Rev. Proc. 2007-47 is provided in Appendix B.

### **POTENTIAL CONSENSUS DEFINITION OF "PUBLIC INTEREST" FOR INDUSTRY-SPONSORED RESEARCH**

As noted above, university and industry representatives agree that the overarching goals of sponsored research in the United States are to promote the progress of science, educate future generations of scientists and engineers, and advance the health, safety, and economic prosperity of U.S. citizens. University and industry representatives also agree that these overarching goals can best be achieved by maximizing the opportunities for research collaboration between U.S. universities and U.S. companies. The challenge is to formulate a public policy that will realize these opportunities.

After a good deal of research and discussion, the Working Group Subcommittee believes there is a potential for consensus among university and industry representatives on six basic principles for formulating a sound public policy on industry-sponsored research at U.S. universities. These six basic principles are as follows:

- Industry-sponsored research should be scientific research that has no immediate commercial application.
- Industry-sponsored research results should be published in a timely fashion and in a form that is readily accessible to interested members of the public.
- Industry-sponsored research should provide scholarly and educational benefits to faculty and students.
- Ownership of patents resulting from industry-sponsored research should reside with universities if the inventions are made by university faculty, by university students, or with use of university facilities.
- Universities should be allowed to license intellectual property resulting from industry-sponsored research to corporate sponsors prior to the commencement of sponsored research projects regardless of whether the research is conducted in privately financed or tax-exempt bond financed facilities.
- Industry-sponsored research should be deemed to be in the "public interest" so long as the above conditions are satisfied.

## CONCLUSION

Industry investment in research at U.S. universities has been tepid in recent years. In terms of total dollar investment, industry-sponsored research at U.S. universities declined between 2001-2004 and increased slightly between 2005-2006.<sup>10</sup> In terms of the percentage of university research supported by industry, industry-sponsored research peaked in 1999 at 7% of total U.S. university research expenditures, but has been flat at 5% since 2003.<sup>11</sup> The Working Group Subcommittee believes it is imperative that industry-sponsored research at U.S. universities be encouraged and increased. A decline in industry-sponsored research poses significant risks to universities, industry, and the U.S. economy. Universities risk losing access to critical funding for future research, access to cutting-edge industrial problems, and access to unique educational opportunities for students and faculty. Industry risks losing access to the latest knowledge, access to highly specialized scientists and engineers, access to state-of-the-art equipment and facilities, and access to highly trained pools of potential new employees. The U.S. economy risks losing opportunities for growth, opportunities for the creation of new jobs, opportunities to improve the balance of trade, and opportunities to gain new competitive advantages in global markets.

The Working Group Subcommittee hopes very much that this report will contribute to an ongoing, constructive dialogue on ways to encourage and increase industry-sponsored research at U.S. universities.

---

<sup>10</sup> NSF Science and Engineering Indicators, Text <<http://www.nsf.gov/statistics/seind08/c5/c5s1.htm>>.

<sup>11</sup> NSF Science and Engineering Indicators, Text <<http://www.nsf.gov/statistics/seind08/c5/c5s1.htm>>.

## APPENDIX A

### THE DISPARATE DEFINITIONS OF "PUBLIC INTEREST" UNDER REV. PROC. 2007-47 AND REV. RUL. 76-296

Under the generally accepted interpretation of Rev. Proc. 2007-47, a university cannot grant a corporate research sponsor any rights in the resulting intellectual property at the time the sponsored research agreement is signed if the research is conducted in facilities built with tax-exempt bonds. Revenue Procedure 2007-47 states that corporate-sponsored research will not be considered a "private business use" of tax-exempt bond facilities provided that:

Any license or other use of resulting technology by the sponsor is permitted only on the same terms as the [university] would permit that use by any unrelated, non-sponsoring party (that is, the sponsor must pay a competitive price for its use), and the price paid for that use must be determined at the time the license or other resulting technology is available for use.<sup>1</sup>

Rev. Proc. 2007-47 was preceded by Rev. Proc. 97-14, which contained the same limitation on licensing intellectual property to corporate sponsors at the commencement of a sponsored research project. Support for Rev. Proc. 97-14 was based on the legislative history of the 1986 Tax Act.<sup>2</sup> The House Ways and Means Committee Report on the 1986 Tax Act stated that "no nongovernmental participant in [a] cooperative research arrangement is entitled to preferential use of any product of the research (including any patent)."<sup>3</sup>

Similarly, the Senate Finance Committee Report on the 1986 Tax Act stated that:

The use of [tax-exempt] bond-financed property by a university to perform . . . research supported or sponsored by . . . other persons pursuant to a cooperative research arrangement is not to be treated as trade or business use by such person . . . provided that any agreed use of any resulting technology by the non-university sponsoring person is permitted only on the same terms by which the university permits such use by any other non-sponsoring unrelated party.<sup>4</sup>

Finally, the Conference Report on the 1986 Tax Act stated that the use of university tax-exempt bond facilities by corporate sponsors would not be treated as a private business use if "the amount charged [to] participating businesses for the use of patents or other resulting technology [is] determined at the time the patent or technology is available for use."<sup>5</sup>

---

<sup>1</sup> Rev. Proc. 2007-47, § 6.02. A research agreement that is considered a "private business use" of tax-exempt bond facilities could result in the loss of the tax exemption for the bond income. Rev. Proc. 2007-47, § 1.

<sup>2</sup> P.L. 99-514 (1986).

<sup>3</sup> H.R. Rep. No. 99-426, 524 (1986).

<sup>4</sup> S. Rep. No. 99-313, 842 (1986).

<sup>5</sup> H.R. Conf. Rep. No. 99-841, II-685-II-689 (1986).

Although Rev. Proc. 97-14 is consistent with the legislative history of the 1986 Tax Act, there is another branch of tax law that sets forth a very different "public interest" test for corporate-sponsored research at universities. This branch of tax law deals with the question of when corporate-sponsored research might constitute the conduct of unrelated trade or business by universities giving rise to taxation of unrelated trade or business income to universities.

The IRS addressed this question in Rev. Rul. 76-296, which provides that "scientific research will be considered as directed toward benefiting the public, and, therefore, regarded as carried on in the public interest if it is carried on for the purpose of obtaining scientific information, which is published in a treatise, thesis, trade publication, or in any other form that is available to the interested public."<sup>6</sup> Rev. Rul. 76-296 goes on to state that the relevant Income Tax Regulations "explicitly provide that [scientific] research will be regarded as carried on in the public interest even though such research is performed pursuant to a contract or agreement under which the sponsor or sponsors of the research have the right to obtain ownership or control of any patents, copyrights, processes, or formulae resulting from such research."<sup>7</sup>

There are two possible ways to reconcile the very different "public interest" tests set forth in Rev. Proc. 2007-47 and Rev. Rul. 76-296. One way is to assume that Rev. Rul. 76-296 was repealed, or rendered invalid, by the passage of the 1986 Tax Act and the IRS's subsequent promulgation of Rev. Proc. 97-14. Although some persons have suggested that this is the case, the Working Group Subcommittee has found a Congressional committee report and an internal IRS continuing education paper that strongly suggest that Rev. Rul. 76-296 is still valid law.

The Congressional committee report was prepared for the Senate Committee on Finance by the Staff of the Joint Committee on Taxation on December 4, 2006.<sup>8</sup> The report noted that an "issue may arise whether commercially sponsored scientific research is carried on in the public interest . . . where the commercial sponsor has a right to ownership or control of the intellectual property resulting from the research." The report cited Rev. Rul. 76-296 as the controlling authority on this question. The report made no mention of Rev. Proc. 97-14.

The internal IRS continuing education paper, dated 1999, focused on intellectual property in tax-exempt organizations.<sup>9</sup> In discussing the meaning of the phrase "in the public interest" as used in Income Tax Regulations § 1.501(c)(3)-1(d)(5), the paper stated: "Rev. Rul. 76-206 is the controlling authority on this subject. The revenue ruling deals with the publication requirement as well as the question of the commercial sponsor's right to exploit the results of research findings. It was published to provide a clear example of how problems involving commercially sponsored scientific research projects should be treated."

---

<sup>6</sup> Income Tax Regulations, § 1.501(c)(3)-1(d)(5)(iii). The "public interest" test referred to in Rev. Rul. 76-296 is the obverse of the "private business use" test referenced in Rev. Proc. 2007-47.

<sup>7</sup> Income Tax Regulations, § 1.501(c)(3)-1(d)(5)(iii).

<sup>8</sup> *Present Law and Background Relating to Tax Exemptions and Incentives for Higher Education*, prepared by the Staff of the Joint Committee on Taxation (December 4, 2006).

<sup>9</sup> R. Darling and M. Friedlander, *Intellectual Property*, 1999 EO CPE Text <<http://www.irs.treas.gov/pub/irs-tege/eotopic99.pdf>>.

The other way to reconcile the different "private business use" tests set forth in Rev. Proc. 2007-47 and Rev. Rul. 76-296 is to limit each test to its specific factual context. Rev. Proc. 2007-47 is concerned with the use of tax-exempt bond facilities by corporate sponsors, and Rev. Rul. 76-296 is concerned with unrelated trade or business income received by 501(c)(3) tax-exempt organizations. However, the distinction between the factual contexts of Rev. Proc. 2007-47 and Rev. Rul. 76-296 is quite narrow. And the question remains: why are corporate sponsor rights in resulting intellectual property consistent with the public interest when the research is conducted in privately financed facilities and inconsistent with the public interest when the research is conducted in tax-exempt bond financed facilities?



## APPENDIX B

### DISCUSSION OF ARGUMENTS FOR AND AGAINST ADOPTING THE DEFINITION OF "PUBLIC INTEREST" IN REVENUE PROCEDURE 2007-47

#### Arguments For Adopting the Definition of "Public Interest" in Rev. Proc. 2007-47

1. Rev. Proc. 2007-47 is not a barrier to university-and-industry-sponsored research collaboration.

Whether Rev. Proc. 2007-47 is a barrier to university-industry sponsored research collaboration depends on institutional perspective. Although some university representatives believe Rev. Proc. 2007-47 is not a barrier to sponsored research collaboration, the great majority of industry representatives believe it is a significant barrier to sponsored research collaboration. However, both university and industry representatives agree that Rev. Proc. 2007-47 is not the only barrier to sponsored research collaboration and that other problems, such as prolonged negotiations on license terms and disagreements over the value of intellectual property rights, as well as matters outside intellectual property area, such as indemnification, liability and publication, also impede sponsored research collaboration.

2. Rev. Proc. 2007-47 protects the academic integrity of university research.

Whether Rev. Proc. 2007-47 is necessary to protect the academic integrity of university research is not clear. First, as noted earlier, if a university believes that the academic integrity of its research requires it to refuse to grant intellectual property rights to corporate sponsors at the commencement of sponsored research projects, the university is free to incorporate this principle in its intellectual property policy statement. Second, if the academic integrity of university research depends on universities performing only basic research, as opposed to job-shop, commercial research, this concern is met by the requirement set forth in Rev. Rul. 76-296 that states that only "scientific" research will be considered to benefit the public and promote the public interest.

3. Rev. Proc. 2007-47 protects universities from inappropriate corporate influence.

Whether Rev. Proc. 2007-47 is necessary to protect universities from inappropriate corporate influence also depends on institutional perspective. While some universities may believe that corporations exert undue influence over their research, other universities actively seek corporate involvement in their research enterprise to assure the relevancy of, and financial support for, their research efforts. It should also be noted that some industry representatives believe the reverse is true; that is, universities exert undue control in licensing intellectual property to corporations, especially intellectual property created with federal (taxpayer) funding.

4. Rev. Proc. 2007-47 recognizes that it is not possible to value intellectual property rights prior to the time the intellectual property is created.

With respect to the relationship between Rev. Proc. 2007-47 and the valuation of licensed intellectual property, it is true that Rev. Proc. 2007-47 requires that intellectual property resulting from a sponsored research project must be licensed at a "competitive price." However, a "competitive price" need not be stated as a fixed dollar amount, but rather can be stated as a specific royalty rate, or a range of royalty rates. Universities typically have standard royalty rates for different types of intellectual property, so a standard royalty rate can be stipulated at the commencement of a sponsored research project. A stipulated standard royalty rate would presumptively be a "competitive price."

5. Rev. Proc. 2007-47 rightly allows universities to obtain higher royalties when the resulting intellectual property has higher value.

Whether Rev. Proc. 2007-47 rightly allows universities to obtain higher royalty rates when the resulting intellectual property has higher value is problematic from an industry perspective. Scientific research is inherently a high-risk enterprise and nobody can know at the outset of a research project whether it will be successful. From an industry perspective, the corporate sponsor assumes the research risk by funding the project. If the research project is not successful, the corporate sponsor bears the loss of the research investment. On the other hand, if the research project is successful, the corporate sponsor expects to receive the benefit of the research - without paying a premium because the research project was successful. To do otherwise would impose all of the downside risk on the corporate sponsor and give all of the upside gain to the university.

6. Rev. Proc. 2007-47 allows universities to grant corporate sponsors options to negotiate future licenses to resulting intellectual property.

Rev. Proc. 2007-47 does allow universities to grant corporate sponsors options to negotiate future licenses to resulting intellectual property. However, an option to negotiate a license is *not* a license. The grant of an option to negotiate a license does not provide the corporate sponsor with any intellectual property rights in the resulting patents or technologies. This is troublesome to many corporate sponsors, especially in light of the language in Rev. Proc. 2007-47 that provides that any license of resulting technology to the sponsor must also be available to non-sponsors on the same terms and conditions. In addition, some universities are not willing to grant sponsors options to negotiate future licenses. These universities are only willing to grant sponsors an agreement to grant an option at some future date. Again, this is troublesome to many corporate sponsors.

7. Rev. Proc. 2007-47 allows universities to grant corporate sponsors licenses without price terms.

With respect to Rev. Proc. 2007-47 allowing universities to grant corporate sponsors licenses without price terms, it is not clear that this type of license is permitted. However, assuming Rev. Proc. 2007-47 does allow this type of license, it is of little benefit to corporate sponsors. A license without a price term is, in essence, no more than an option to negotiate a license. And, as a small point of law, contracts without price terms are rarely enforced by courts because they do not manifest the parties' agreement to the most fundamental terms of the contract.

8. Rev. Proc. 2007-47 allows universities to grant corporate sponsors "private business use" of tax-exempt bond facilities up to either 5% or 10% of the amount of the bond proceeds.

It is true that Rev. Proc. 2007-47 allows "private business use" of tax-exempt bond facilities by corporate sponsors up to 5% of the bond proceeds for public universities and up to 10% of the bond proceeds for private universities.<sup>1</sup> This allowed private business use could include granting corporate sponsors rights in the resulting intellectual property at the commencement of the research project. There are problems, however, with this allowed "private business use" from both industry and university perspectives. From the industry perspective, the allowed "private business use," and hence the opportunity to obtain rights in the resulting intellectual property at the commencement of the research project, is very limited. From the university perspective, calculating the amount of "private business use," and attributing various fixed and variable costs to "private business use," is a very difficult and risky accounting task. For this reason, many universities are unwilling to utilize the "private business use" allowance under Rev. Proc. 2007-47.

*Arguments Against Adopting the Definition of "Public Interest" in Rev. Proc. 2007-47*

1. Rev. Proc. 2007-47 retards U.S. domestic economic development and threatens U.S. international competitiveness.

Whether Rev. Proc. 2007-47 retards U.S. domestic economic development and threatens U.S. international competitiveness is a complex question of causation and measurement. Clearly, many factors other than Rev. Proc. 2007-47 affect U.S. economic development and competitiveness; and, to the extent Rev. Proc. 2007-47 does affect U.S. economic development and competitiveness, the magnitude of this effect is difficult to measure. However, the relationship between university-sponsored research and regional economic development in the United States is clearly established; so much so that many other countries are adopting the U.S. model. Although the negative impact of Rev. Proc. 2007-47 on sponsored research and economic development in the United States may not be easy to measure, nobody, certainly in industry, would suggest that Rev. Proc. 2007-47 promotes sponsored research and economic development. The question then becomes why even risk negatively impacting sponsored research and economic development, even if we do not know the precise magnitude of the negative effect?

2. Rev. Proc. 2007-47 is driving U.S. industry to increasingly invest in research at foreign universities.

Whether Rev. Proc. 2007-47 is driving U.S. industry to invest in research at foreign universities is also a complex question. Other factors, such as performing research in areas close to overseas manufacturing and marketing and the growing parity in science and engineering education in a number of other countries, may drive research investment at foreign universities far more than Rev. Proc. 2007-47. However, the question here is the same as above. If the goal is to maximize

---

<sup>1</sup> IRC § 141(b).

U.S. industry investment in research at U.S. universities and Rev. Proc. 2007-47 poses even a small obstacle to this goal, why take this risk?

3. Rev. Proc. 2007-47 is inconsistent with the Bayh-Dole Act.

Whether Rev. Proc. 2007-47 is inconsistent with the Bayh-Dole Act depends upon how one interprets the goal of the Bayh-Dole Act. If one interprets the goal of the Bayh-Dole Act as benefiting universities by providing them title to intellectual property resulting from federally-funded research, then there is no conflict with Rev. Proc. 2007-47. Under this interpretation, universities are the primary beneficiaries of the Bayh-Dole Act and their beneficiary status is not affected by Rev. Proc. 2007-47. On the other hand, if one interprets the goal of the Bayh-Dole Act as benefiting the public by making federally-funded inventions available to the public through commercialization by private industry, then there is a conflict with Rev. Proc. 2007-47.<sup>2</sup> Under this interpretation, university intellectual property ownership is a means to an end, not an end in itself; that is, university intellectual property ownership is intended to facilitate the transfer of federally-funded inventions to private industry so that the inventions can be commercialized for the benefit of the public. The preamble statement of policy objective in the Bayh-Dole Act makes clear that the latter interpretation is correct; the Act was intended "to promote the commercialization and public availability of inventions made [with federal funding]," not to benefit universities.<sup>3</sup>

4. Rev. Proc. 2007-47 is in conflict with the Small Business Technology Transfer Program ("STTR").

There is a direct conflict between Rev. Proc. 2007-47 and the STTR Program Policy Directive. Under the STTR Program Policy Directive, a small business corporation sponsoring a research project at a university must negotiate a written agreement with the university to obtain the intellectual property rights necessary to conduct follow-on research *before receiving an STTR award*.<sup>4</sup> Since an STTR award precedes the commencement of the sponsored research project, the written agreement with the university on intellectual property rights would also have to precede the commencement of the sponsored research project. This is precisely prohibited by Rev. Proc. 2007-47.

5. Rev. Proc. 2007-47 can operate to force corporate research sponsors to subsidize their competitors' research.

The argument that Rev. Proc. 2007-47 can cause corporate sponsors to subsidize their competitors' research is a technical argument, but nonetheless troublesome to industry

---

<sup>2</sup> A specific example of the conflict between Rev. Proc. 2007-47 and the public benefit interpretation of the Bayh-Dole Act occurs when a federally-funded invention requires follow-on research to be commercialized, which is very often the case. If potential corporate sponsors of the follow-on research are unsure of the rights they will receive in the intellectual property resulting from the follow-on research, they may refuse to sponsor the follow-on research, in which case the public will never receive the benefit of the federally-funded invention.

<sup>3</sup> 35 U.S.C.A. § 200.

<sup>4</sup> STTR Policy Directive, 70 Fed. Reg. 74,935 (2005).

representatives. As noted above, Rev. Proc. 2007-47 requires that any license to resulting intellectual property granted to a corporate sponsor must be available on non-sponsors on the same terms and conditions. Although Rev. Proc. 2007-47 also provides that universities need not grant licenses to non-sponsors, the possibility that a non-sponsor could obtain a license on the same terms and conditions as the sponsor is a concern to many industry representatives because the non-sponsor interested in a license could well be a competitor of the sponsor, and thus the sponsor could inadvertently fund research that is then provided to a competitor.

6. Rev. Proc. 2007-47 denies sponsors and universities the flexibility to negotiate agreements at the commencement of research projects that advance the unique needs and interests of universities and sponsors.

Not only does Rev. Proc. 2007-47 deny universities and sponsors the *flexibility* to negotiate license terms prior to the commencement of a research project according to their unique needs and interests, in practice Rev. Proc. 2007-47 denies the parties the opportunity to negotiate *any* meaningful license terms prior to commencement of a research project. This deprives universities and sponsors of the opportunity to experiment with new and creative collaborative research arrangements to benefit students, faculty, universities, and corporate sponsors.

7. Rev. Proc. 2007-47 limits the educational benefits and career opportunities that industry-sponsored research can provide students.

Industry-sponsored research provides important educational benefits to students. To the extent Rev. Proc. 2007-47 deters corporations from sponsoring research projects, these educational benefits are lost. Likewise, industry-sponsored research provides students with career opportunities with corporate sponsors. These career opportunities are also lost when corporations are deterred from sponsoring research projects.

8. Rev. Proc. 2007-47 makes it very difficult for corporate sponsors to budget the cost of developing new technologies at the outset of a research project.

Rev. Proc. 2007-47 does make it very difficult for corporate sponsors to budget the cost of developing new technologies at the outset of a research project. If price terms can not be negotiated at the time a sponsored research agreement is signed, the cost to the sponsor of the resulting patents and technology can not be factored into the business case for going forward with the sponsored research project. In many instances, this cost uncertainty may be enough to cause the corporate sponsor to refrain from the research investment.

9. Rev. Proc. 2007-47 is anticompetitive in that it does not allow universities to independently negotiate the terms and conditions of sponsored research agreements.

Rev. Proc. 2007-47 is anticompetitive in the sense that it does not allow universities to compete for sponsored research funds by offering more attractive license terms in addition to state-of-the-art facilities and expert researchers. As nonprofit organizations, universities are not subject to the same stringent competition laws as private entities. However, it is generally assumed that competition promotes the public good in the nonprofit sector as well as in the for-profit sector.

In the case of sponsored research, changes in Rev. Proc. 2007-47 would allow more universities to better compete for sponsored research funding, and would allow more corporate sponsors to better compare the combination of research facilities, research faculty, and license terms.