Neutral International Tax Rules Allocating Costs:
Successful Formula for U.S. Research and Development

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I. INTRODUCTION

The decline of U.S. research and development efforts in recent years dominates political, scientific and academic discourse. It is attributed, in part, to military research cutbacks after the end of the cold war and, in part, to the U.S. economic recession. Many fear that the research and development slowdown portends the demise of the United States as a significant factor in the global market for goods and services. Others believe the decline is only one of many indicators of the diminished competitive position of the United States in the global economy. In a pre-election proposal to stimulate technological growth and to strengthen industry for anticipated "international trade wars of the 1990's and beyond," President Clinton advocated a shift of at least thirty billion dollars from military research activities to the private sector over a four year period. The Clinton proposal envisioned cost sharing technology joint ventures between the federal government and private industry.

Increased government spending is one way to stimulate research and

* ©1993 Karen B. Brown. Professor of Law, Brooklyn Law School. This article is dedicated with every morsel of love to my husband, Blair C. Dickerson. Thanks for the Grand Teton! I also thank Brooklyn Law School for its generous financial support for summer research and my assistant, Pamela Fanning, for her very valuable research support.


2. Id.

3. See id. The National Science Board reported that the U.S. share of the global market for high technology goods fell from 40% in 1980 to 37% in 1988. Id. at A16.


6. See id. at C14.
development activity. International tax policy also may provide research incentives. One example of important tax rules for U.S. businesses is the rules governing the allocation and apportionment of research and development expenses to domestic or foreign source income. Research cost allocation is a crucial determinant of the allowable foreign tax credit for multinational businesses.\(^7\) Designed to mitigate the double taxation hazard to U.S. businesses that operate in other countries, the foreign tax credit permits a taxpayer to offset against its U.S. tax liability certain income taxes paid to foreign countries. Because the credit against U.S. tax liability is limited to a tax computed at U.S. rates on foreign source taxable income,\(^8\) the Internal Revenue Code rewards the allocation of research expenses to domestic source income, which results in a corresponding increase in foreign source taxable income as a proportionate part of worldwide taxable income.\(^9\) In the past, Congress has employed international tax policy to stimulate U.S.-based research by enacting rules that favor U.S.-based research. Those rules were promulgated in response to complaints by the U.S. business community that the 1977 regulations resulted in an inappropriate allocation of research expenses to foreign source income, which resulted in an inability to obtain full credit against U.S. tax liability for taxes paid abroad.\(^10\) President Clinton’s most recent initiative, which is part of his new economic plan, proposes allocation of all U.S.-based research costs to domestic source income.\(^11\) This article contends that tax rules should not provide an incentive


\(^8\) IRC § 904(a). The appropriate rate is the taxpayer’s effective U.S. rate.

\(^9\) See 1987 R&D Hearing, supra note 7, at 18.

\(^10\) The revised rules accommodated the demands of U.S. business. The problem was created by foreign income tax rules that denied a deduction for research conducted in the United States. The denial of the deduction resulted in a higher foreign income tax liability. The failure of the U.S. rules to apportion all of the research cost deduction to domestic source income resulted in lower foreign source taxable income for U.S. purposes (because more of the research deduction was allocated to foreign source income) and a lower foreign tax credit for U.S. income tax purposes. See Research and Experimental Source Allocation Rules: Hearings Before the Subcomm. on Oversight of the House Comm. on Ways and Means, 98th Cong., 1st Sess. 191-94 (1983) [hereinafter 1983 Hearings].

for U.S.-based research. Accordingly, this article supports neutral tax rules that apportion research costs on the basis of income expected to be derived from those activities.

II. ORIGIN OF CURRENT RESEARCH AND DEVELOPMENT ALLOCATION RULES

Section 174(a) of the Code permits a deduction for research or experimental expenditures made in connection with a trade or business. Research or experimental expenditures are those "incurred in connection with a trade or business which represent research and development costs in the experimental or laboratory sense." U.S. multinational businesses must determine the proper method for allocating and apportioning those expenses to domestic or foreign source income in order to compute foreign tax credit. Because of the foreign tax credit limitation, U.S. taxpayers prefer to allocate most research costs to domestic source income. Allocation of expenses to domestic source income will result in higher foreign source taxable income and increase the credit for foreign income taxes paid.

12. In the absence of the rule expressed in section 174(a), a taxpayer would capitalize research and development expenditures either as start-up costs or as the cost of acquiring a resulting product or service. 1987 R&D Hearing, supra note 7, at 3. In lieu of the annual deduction permitted by section 174(a), a taxpayer would recover the expenses either as an offset against proceeds received upon sale of the product or service or over a fixed period of time if special amortization rules applied.

13. Regs. § 1.174-2(a)(1). The term "research or experimental expenditures" includes "costs incident to development of an experimental or pilot model, a plant process, a product, or formula, an invention, or similar property...." Id. Stankevich v. Commissioner, 64 T.C.M. (CCH) 460, T.C.M. (RIA) ¶ 92,458, at 92-2467 (1992); Natbony, infra note 61, at 362. The term does not include expenditures for the acquisition or improvement of land or property subject to an allowance for depreciation or depletion even if the property is used in connection with research or experimentation; however, depreciation or depletion allowances for property used in connection with research or experimentation are deductible under section 174. Regs. § 1.174-2(b)(1).

14. The term "allocation and apportionment" of deductions is a term of art defined in Regulations sections 1.861-8(a)(2), (b), (c) and 1.861-8T(c)(1). The regulations provide rules for many types of deductions including interest, charitable contributions, taxes, legal and accounting fees, and losses, as well as research expenses. A deduction must be allocated to a class of gross income to which it is definitely related and then apportioned within the class to foreign or domestic source income on the basis of factual relationship. 2 J. Isenbergh, U.S. Taxation of Foreign Taxpayers and Foreign Income 195-201 (1990). For purposes of this article, the terms "allocation" and "apportionment" are used interchangeably.

15. See 1987 R&D Hearing, supra note 7, at 17. "[A] statutory formula limits the foreign tax credit so that the credit will offset only the U.S. tax on the taxpayer's foreign income." Id. Foreign source taxable income grows higher as more of the research deduction is allocated to domestic source income. Consequently, allocation of a larger portion of the
The current research allocation and apportionment rules derive from regulations promulgated by the Treasury Department in 1977. The regulations treat research and development expenditures as related to all classes of gross income "reasonably connected" to specified product categories. Classes of gross income include interest, royalties, business income, and compensation for services. Under an exception, research expenses undertaken solely to meet legal requirements imposed by a political entity are allocated only to the geographic source in which the taxpayer anticipates substantially all of the gross income resulting from that research will be generated (the "government requirements rule").

Viewing research and development as most valuable in the country in which it is performed, the regulations require apportionment of all research or experimental expenditures, not subject to the government requirements rule, on the basis of a fixed formula and on the location of research activities. Thirty percent of the deduction for research expenses is apportioned to the grouping of gross income arising from the geographic source where research activities accounting for more than half of the amount of the deduction were performed. The balance of the deduction is apportioned to the statutory (foreign source) and residual (domestic source) research deduction to U.S. income permits a taxpayer to maximize its foreign tax credit.

20. Regs. § 1.861-8(e)(3)(ii)(B). The regulations apply the exception by example. If, for instance, the taxpayer performs tests on a product under a U.S. Food and Drug Administration requirement, the costs of testing are allocated solely to U.S. source gross income if the test results "cannot reasonably be expected to generate amounts of gross income (beyond de minimis amounts) outside the United States." Id.
21. The regulations offer two reasons for the conclusion that research is most valuable in the country in which performed. First, research benefits a broad product category consisting of products likely to be sold in the nearest (domestic) market. Second, results of research are utilized in the nearest market before they are utilized in foreign markets. Consequently, the regulations conclude that research has a lower value per unit of sales when used in foreign markets. Regs. § 1.861-8(e)(3)(ii)(A). The regulations presume that only some products benefiting from a taxpayer's research activities will be sold in foreign markets because they do not require that the taxpayer demonstrate minimal foreign sales in order to rely upon the fixed percentage apportionment rule. If, however, the taxpayer wishes to establish entitlement to a greater fixed percentage, it must establish that the research and development is reasonably expected to have very limited or long delayed application outside the geographic source where it was performed.
22. The fixed percentage was 40% for taxable years beginning in 1978 and 50% in 1977. Regs. § 1.861-8(e)(3)(ii)(A).
23. Id.
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24. Sales from the same product category by unrelated ("uncontrolled") parties who can be expected to benefit from the taxpayer’s research are included in apportioning the research deduction. The covered sales are those involving intangible property licensed or sold by the taxpayer to the unrelated party. Regs. § 1.861-8(e)(3)(iii)(C). Sales by related ("controlled") parties are also considered in the apportionment if those parties can be expected to benefit from the taxpayer’s research expense. Regs. § 1.861-8(e)(3)(ii)(D). A controlled party is a party that bears a relationship specified in section 267(b) to the taxpayer or is a member of a controlled group of corporations to which the taxpayer belongs under section 993(a)(3) of the Code. Regs. § 1.861-8(e)(3)(ii)(C).

25. The optional method does not permit automatic allocation of 30% of research expenses to the geographic source where activities accounting for more than 50% of the deductions were performed. Regs. § 1.861-8(e)(3)(iii).


allocation regulations. The moratorium derived from Congress' concern that the regulations provided a disincentive for multinational businesses to conduct research and development in the United States. This resulted because the regulations caused a portion of research and development expenses conducted in the United States to be allocated to foreign source income. In some cases, a foreign country in which the business operated did not permit deduction of research expenses conducted in the United States. The unavailability of a deduction for research activities against foreign income (presumably earned as a result of U.S.-based research) increased the amount of foreign income taxes due. However, the U.S. tax rules denied full credit for the foreign taxes to be applied against U.S. tax liability because foreign source taxable income, which determines the limitation on the foreign tax credit, was reduced by a portion of expenses from U.S. research activities. Consequently, Congress was concerned that businesses would locate research activities outside of the United States in countries that permitted deduction of research expenses only for activities conducted within their borders.

The moratorium, enacted by the Economic Recovery Tax Act of 1981, substituted for the regulations a rule requiring that expenses from U.S.-based research activities be allocated or apportioned solely to U.S. source income. The remaining research expenses (from foreign-based research activities) were apportioned on the basis of sales or gross income, as described above. Deduction of the expenses solely against U.S. source income resulted in an increase of foreign source taxable income, which increased the foreign tax credit.

After a 1983 Treasury Report indicating that a reduction in U.S.-based research and development could adversely affect the competitive position of the United States, the moratorium was extended for two additional years. In 1985, Congress again extended the moratorium, that time for one year. The moratorium expired with the enactment of the Tax Reform Act

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of 1986. The 1986 rules, effective for taxable years beginning after August 1, 1986 and on or before August 1, 1987, retained the government requirements rule of the regulations, but made three modifications to other provisions. First, it permitted allocation of fifty percent of U.S.-based research expenses to U.S. source income. Second, it permitted use of the fifty percent allocation rule even by taxpayers electing the optional gross income method. Third, it suspended the rule requiring users of the optional gross income method to apportion to foreign source income at least fifty percent of the amounts apportioned under the sales method.35

In 1988, Congress enacted new research expense allocation rules.36 The new rules retained the former government requirements rule of the regulations, which in general required allocation of research expenses to the geographical location of the political entity imposing legal requirements that necessitate the conduct of research.37 For all other research expenses, the rules allocated sixty-four percent of expenditures for research conducted in the United States to U.S. source income and sixty-four percent of expenditures for research conducted outside the United States to foreign source income.38 The remainder was apportioned at the taxpayer’s election on the basis of either gross sales or gross income.39 Special provisions governed expenditures attributable to activities conducted in space and activities of affiliated groups.40 The rules were a stop-gap measure that applied for only four months of the taxable year beginning after August 1, 1987.41 The 1977 regulations applied to the balance of the year.

In 1989, Congress enacted Code section 864(f) to deal with the allocation question and to eliminate the necessity for periodic modifications of the 1977 regulations. The provisions contained in the new Code section were identical to those enacted in 1988. The rules adopted were not

39. Id. § 4009(a)(3) (requiring taxpayer electing apportionment on the basis of gross income to apportion to foreign source income at least 30% of the amount apportioned to foreign source income on the basis of gross sales).
40. Id. § 4009(c), (d).
41. Id. § 4009(e). The rules applied only to a prorated amount of research expenses for the year determined by applying a fraction for which the numerator was four months and the denominator was the total number of months for the year.
permanent, however, as they were effective only for taxable years beginning after August 1, 1989 and before August 2, 1990. They did not apply to all taxpayers because they did not affect the apportionment method of foreign taxpayers for all purposes. The rules applied only for nine months of the affected taxable years.

Congress extended section 864(f) in 1990 and again in 1991, but failed to extend the provision in 1992. Consequently, those rules expired on June 30, 1992 for calendar year taxpayers. Commentators concluded that on expiration of section 864(f) the 1977 regulations regained control over the allocation of research deductions by U.S. businesses. In July, 1992, however, the Service issued Revenue Procedure 92-56, which permitted U.S. taxpayers to elect to apply rules substantially similar to those contained in section 864(f) rules for eighteen months. Eventually these

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42. IRC § 864(f) (1989). In addition, the rules applied only to the portion of research expenses treated as having been incurred in the first nine months of the year for which the rules were effective. Id.

43. Although section 4009 of the 1988 Act and section 864(f) are identical, the 1989 House Ways and Means Committee Report states that the rules do not apply to foreign taxpayers for purposes of computing taxable income effectively connected with conduct of a U.S. trade or business. Because section 864(f) did not apply, the 1977 regulations governed foreign taxpayers for those purposes.


46. § 101(a), 105 Stat. at 1686 (providing that section 864(f) is effective for the first six months of the taxable year beginning after August 1, 1991).

47. See, e.g., Turro, infra note 54, at 1140.


49. As section 864(f) applied only to U.S. taxpayers, it appears that Revenue Procedure 92-56 applies only to U.S. taxpayers.

50. The rules are effective for the last six months of a taxpayer's first taxable year beginning after August 1, 1991, and for the subsequent taxable year. 1992-28 I.R.B. 7. Unlike section 864(f), apportionment on the basis of gross sales must take into account sales of controlled and uncontrolled parties as required in Regulations section 1.861-8(e)(3)(ii)(C), (D). Revenue Procedure 92-56 was modified by Revenue Procedure 92-69, 1992-36 I.R.B. 18 which provided guidance for section 936 corporations, certain corporations doing business in U.S. possessions. Some commentators believe that interim guidance issued by the Treasury Department may be invalid. Turro, infra note 54, at 1141. After expiration of section 864(f) and in the absence of legislative or administrative action, Regulations section 1.861-8(e)(3) regained effect for U.S. taxpayers. It has also been asserted that the Treasury Department has the authority to provide interim guidance modifying the regulations. See John B. Jones, Sr., et al., IBM Urges Modification of R&D Allocation Regs., (May 6, 1992) (LEXIS, Fedtax library, TNI file, elec. cite 92-TNI 19-24, at 19); Edmund T. Pratt, Jr., Pfizer Seeks Modification of R&D Rules, (Apr. 29, 1992) (LEXIS, Fedtax library, TNI file, elec. cite 92-TNI 18-36, at 9 (suggesting that in the absence of a contrary Code provision, "Treasury has
rules will be replaced by permanent rules promulgated by the Treasury
Department or enacted by Congress.

A recent proposal by the Clinton administration, which is part of the
President’s comprehensive economic plan, offers two permanent proposals
that affect research cost allocation rules. First, all expenses for U.S.-based
research would be directly allocated to domestic source income,\(^5\) and all
expenses for foreign-based research would be allocated on the basis of gross
sales.\(^2\) Second, the tax credit for increases in qualified research expenditures
for U.S.-based activities would be extended.\(^3\)

The next section urges rejection of the Clinton proposal in favor of
a neutral rule that would not accord a preference to U.S.-based research.

**III. U.S. TAX RULES SHOULD NOT FAVOR U.S.-BASED RESEARCH**

As described above, in recent years, foregoing appraisal of rational
tax policy, Congress has enacted a series of temporary stop-gap research cost
allocation measures that never became permanent. The international tax legal
community has expressed concern about the absence of rules concerning the
allocation of research and development expenses.\(^4\) This article addresses
this concern by proposing new permanent rules that would eliminate the
weaknesses of the expired rules.

In general, one must distinguish between the rules set forth in the
regulations that applied before the effective date of section 864(f), the pre-
moratorium regulations, and the rules set forth in new Code section 864(f),
the post-moratorium rules. The pre-moratorium regulations provided a
complex allocation and apportionment formula to be used by domestic and

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\(^{51}\) Summary of Administration’s Revenue Proposals, supra note 11, at 57-59.

\(^{52}\) This part of the proposal was added by section 2311(a) of the Revenue Reconc-
ciliation Bill of 1993, the Administration’s Proposal submitted to Congress on April 30, 1993.
Section 2311(b) authorizes regulations regarding the determination of whether activities are
conducted in or outside the United States and the provision of adjustments for cost-sharing
arrangements and contract research. The rules would be effective for taxable years beginning
after December 31, 1993.

\(^{53}\) Summary of Administration’s Revenue Proposals, supra note 11, at 9-10. A third
proposal, not directly relevant to the issues discussed in this article, combines the research cost
allocation rules with a proposal to treat all foreign source royalty income as passive separate
limitation income in order to reduce a preference for licensing intangible property to foreign
persons for use abroad. See infra text accompanying notes 87-89. Objections to the royalty
income proposal apparently led to its rejection by the Ways and Means Committee. See
Comparison, supra note 11, at 995; Covington & Burling, Foreign Royalty Income: Response
to Treasury Briefing Paper, 59 Tax Notes 829 (May 10, 1993).

\(^{54}\) See, e.g., John Turro, The U.S. R&D Allocation Deal: Is This Any Way to Run
foreign multinational businesses. A fixed portion (thirty percent) of research and development costs was apportioned to income derived from the location of research activities. Under the post-moratorium rules of section 864(f), sixty-four percent of research costs was allocated to income derived from the location of research activities.55

The post-moratorium rules were arbitrary and inconsistent. They were primarily based upon a factor, location of research activities, that bears no apparent relationship to the benefits and burdens of research on business. Furthermore, they did not apply to foreign businesses with operations similar to those of domestic companies. The pre-moratorium rules were complex and also applied an arbitrary allocation formula based, in part, upon the location of research activities. Both sets of rules were inadequate because they were founded upon chauvinistic goals and lack of familiarity with modern operations of international businesses.

Research and development is a valuable business activity.56 Government action to encourage that activity—by direct subsidy of research ventures—is appropriate and increasingly necessary in the competitive international business arena. Favorable tax rules allocating research costs also may influence research strategies for multinational businesses. The enactment of such rules, however, is not a valid means of stimulating research and development.57 The development of sound tax policy is informed by three important goals—maximization of revenue, fairness and efficiency.56 These goals have been neglected by Congress and the executive branch in the formulation of research and development tax rules. These goals are not and cannot be served by tax rules that encourage U.S.-based research.

This article advocates adoption of neutral research expense allocation rules that address these three goals. The expired rules described above failed because they resulted in an unnecessary loss of U.S. revenue, treated foreign and domestic taxpayers differently, did not respond to the needs of multinational businesses and ignored recent trends in the global marketplace.

The expired rules allocated a fixed portion of costs to domestic source income on the basis of location of research activities. As noted above, allocation of costs to domestic source income reduces domestic taxable

55. A 1982 study prepared for the Commerce Department found that the most reliable apportionment figure would be 56%. The 64% rule adopted in section 864(f) approximates that figure. See Jones, supra note 50, at 15 (discussing A. Benvignati, Impact of American Tax Policy on the Level and Location of Industrial Research and Development 3 (Mar., 1982)).
56. Hufbauer, supra note 4, at 9.
57. Not all tax subsidies are objectionable. However, the subsidy provided by the research allocation rules is misguided because, as is discussed in Part IV below, it does not achieve its stated goal.
income and increases foreign taxable income, which increases the portion of foreign income taxes that serve as a credit to offset U.S. tax liability. While, arguably, the rules provided an incentive for the performance of research in the United States by lowering the overall tax cost of U.S.-based research, they also had two negative effects. First, they created a tax subsidy and caused a loss of U.S. tax revenue. That revenue loss was not matched by a discernible corresponding benefit to the government, except a possible unquantifiable benefit in the mere proliferation of research in the United States. Second, the incentive was not available to foreign businesses conducting research activities in the United States for purposes of determining a taxable income effectively connected with a U.S. trade or business. For those purposes they were required to allocate research expenses largely on the basis of gross sales or gross income. Denial of a tax subsidy to foreign businesses without demonstration of a detriment or lack of benefit to the U.S. government cannot be supported.

The expired rules also were not successful because they did not allocate research costs to the U.S. and non-U.S. revenue generated by the enterprise. Arbitrary allocation as demonstrated by the formulary approach adopted by those rules forecloses any measure of the appropriate amount of income to be taxed. That approach encourages inefficient allocation of resources by U.S. businesses because it focuses solely on the location of research.

A tax policy that encourages the conduct of research activities in the United States represents mere chauvinism. Such a policy is misplaced because it ignores the growing trend of internationalization of industrial research and development. U.S. tax policy should permit U.S. businesses to secure the most efficient research and development opportunities whether they are in or outside of the United States. It should also support collaboration among U.S. and foreign businesses and academic institutions. Indeed, in one of its own major research activities, the superconducting supercollider, the U.S. government has sought international collaboration.

59. See supra note 10.
60. See infra note 81.
62. See Regs. § 1.861-8(e)(3). Even under the regulations, 30% of research costs are apportioned automatically to income arising from the source where research activities accounting for more than 50% of the deduction were performed. Regs. § 1.861-8(e)(3)(iii)(A).
63. Under construction near Waxahachie, Texas, the supercollider is the world’s largest proton accelerator. When completed, at an estimated cost of $8.4 to $10 billion, it is expected to “move science a giant step closer to understanding why the universe contains the
unwillingness to consider the policy advantages in international collaboration in research and development is inconsistent and wrong.

Tax rules that favor U.S.-based research derive, in part, from an inaccurate idea that such activities will produce products that will wipe out the burgeoning U.S. trade deficit. However, despite the enactment since 1981 of a series of tax rules encouraging research in the United States, domestic research has declined and international research ventures have proliferated. Moreover, since 1981, the U.S. trade imbalance has steadily accelerated. The government has demonstrated no connection between exports of U.S. products and the location of research activities (United States versus foreign locations) by U.S. taxpayers. Finally, there is no nexus between the measurement of income appropriately taxed and the expired U.S. tax rules that set up a preference for location of the activities in the United States. Consequently, failure to encourage international collaboration places the United States in the unfortunate position of exalting a weak national interest (pride in U.S. ingenuity) over stronger international (efficiency and collaboration) and national (revenue and rational tax rules) interests.

The Organization of Economic Cooperation and Development ("OECD") has reported the increase in cooperative research and development ventures among companies in OECD countries, including the United States, in their home countries as well as abroad. Collaboration offers a number of advantages. It permits distribution of costs around the world, utilization of kind of matter it does, and why matter has familiar but unexplained properties, particularly mass." Malcolm W. Browne, Roy F. Schwitters, Scientist at Work: Building a Behemoth Against Great Odds, N.Y. Times, Mar. 23, 1993, at C1. The supercollider began under the Reagan administration, but the push to "internationalize" the project began when the Bush Administration grew to fear that rising costs would doom it and other "big science projects." David E. Sanger, Bush in Japan, In Setback for Administration, Japan Gives No Aid on Supercollider, N.Y. Times, Jan. 9, 1992, at A9. A key target, the Japanese government, has not committed itself to the U.S. project, citing consideration of various alternative approaches. Recently, Taiwan voted against joining the project. Malcolm W. Browne, Clinton Backs Funds for Science Projects, N.Y. Times, Feb. 23, 1993, at C2.

65. Broad, supra note 1; Hufbauer, supra note 4, at 11.
66. See infra note 68.
67. The United States taxes the worldwide income of its citizens and residents, including that of domestic corporations that operate internationally. Foreign based research would generate products to be sold that are nonetheless subject to U.S. tax unless the technology is sold or licensed to a foreign subsidiary. The Code contains special provisions designed to curb possible abuses in the transfer of technology abroad. See infra text accompanying notes 85-89; 1987 R&D Hearing, supra note 7, at 41.
68. Robert Brainard, Internationalizing R&D, OECD Observer, Feb.-Mar. 1992, at 7, 8; see also Hufbauer, supra note 4, at 8 ("To be sure R&D has become more international, but this is largely the result of cross-border alliance between firms to share firm-specific expertise rather than a global spread of R&D facilities.").
the expertise of local and foreign personnel and the combination of technological strengths in strategic ways. In addition, companies may derive cost benefits from pooling resources, but they may continue competitive advantages in the application and marketing of technology. The increasing involvement of U.S. companies in international research and development agreements suggests that the U.S. government's chauvinistic tax policy ignores the reality of current business practices and may impede development.

In creating new rules, Congress must acknowledge that the interest of the United States lies in encouragement of international research and development collaborations and, hence, in elimination of location-based research allocation rules. Consequently, Congress should reject the recent proposal by the Clinton Administration to allocate research costs to the place of performance. The proposal, which is part of President Clinton's comprehensive economic plan, is designed to encourage the conduct of research in

69. Brainard, supra note 68, at 8. Recent examples of potential savings from international collaborations abound. For example, the race for a worldwide standard in a high-definition television system would have been less costly if the United States, Europe and Japan had cooperated in the development of the new digital technology currently under examination by the Federal Communications Commission. Instead, the European Community recently announced a decision to abandon its own efforts to develop "conventional analog, or wave, broadcasting systems" because the U.S.-developed technology is certain to become the worldwide standard. The move enabled the European Community to avoid wasting another $600 million on the European technology. Two European companies, one Dutch and one French, participated in the U.S. research effort as members of a consortium. Richard W. Stevenson, Europeans Giving Up Advanced-TV Project, N.Y. Times, Feb. 20, 1993, at A46.

70. Brainard, supra note 68, at 9.

71. Id. The OECD staff has proposed that OECD countries reject nationalistic policies:

The science and technology policies of OECD countries at present tend to have an intrinsic insular bias. To offset it, priority should be given to developing international collaboration in pre-commercial R&D and to promoting technological activities that combine resources and complementary technical capabilities, with particular emphasis on 'generic technologies.'

Id. at 10.

72. As the OECD staff noted:

To formulate policies for exploiting the potential technological and economic gains of internationalization, governments have to determine where 'national interest' lies in an era of transnational integration of industrial and economic activities. It is significant that there is an apparent divergence between the global strategies of companies and the national policies of governments; indeed, they frequently seem to be at cross-purposes. Yet the respective objectives of the nation-state and multinational industry can be reconciled.

Id.
The plan is commendable for its goal of simplifying complex rules and thereby promoting compliance.\textsuperscript{73} For the reasons discussed above, however, it is misguided in its goal of encouraging the location of research in the United States. The current state of the U.S. economy, the need for rational tax rules and the needs of U.S. multinational businesses and the international community demand a different tactic. Congress should adopt a neutral rule, discussed more fully below in section IV, that connects research costs to projected benefits. The rule would completely eliminate allocation on the basis of location of research activities. Instead, research costs would be allocated on the basis of gross sales or gross income expected to be derived from the activity or on the basis of the asset method of apportionment similar to that provided in the interest allocation rules. In addition, an alternative method would permit the taxpayer to establish any other reasonable method of allocation and apportionment consistent with other business practices.\textsuperscript{74}

While this article contends that U.S. tax rules should not provide an incentive for U.S.-based research, it acknowledges that suitable methods of encouraging research by U.S. businesses do exist. The most appropriate method is a direct appropriation to U.S. business, such as President Clinton's pre-election proposal to shift military funding to private industry research and the related recent announcement of the President's technology initiative.\textsuperscript{75} Direct appropriation would renew opportunities for research and development by U.S. businesses without frustrating the tax policy and international community goals discussed above.

Another possible measure is extension of the research credit for all activities of U.S. taxpayers. An incremental credit, such as the credit for increases in certain qualified research expenses provided by section 41, may increase research activity by U.S. taxpayers.\textsuperscript{76} President Clinton's proposal calls for extension of the credit for U.S.-based activities only. However, such a limited credit presents the same problem found in the research cost allocation proposal, that of providing a preference for U.S.-based activities with no significant benefit to the government. Moreover, it frustrates the other important national and international goals discussed above. Consequently, if no revenue concerns existed, then a better solution would be to extend the credit for qualified expenditures wherever conducted. However, the Joint

\textsuperscript{73} Administration's Revenue Proposals, supra note 11, at 58.
\textsuperscript{74} Cf. Regs. § 1.863-3(b)(2) ex. 3 (describing procedure to obtain permission for alternative method of allocating sales receipts to U.S.-source income and foreign-source income).
\textsuperscript{75} John Markoff, Clinton Proposes Changes in Policy to Aid Technology, N.Y. Times, Feb. 23, 1993, at A1; see also Broad, supra note 5.
\textsuperscript{76} But see Natbony, supra note 61.
Committee on Taxation estimated that extension of the research credit to U.S.-based expenditures alone would result in a revenue loss of $6.2 billion over a four year period. Because extension of the credit to all expenditures would create an unsupportable revenue loss, extension of the credit is rejected.

The next section of this article discusses the failure of the U.S. rules to account for modern international business practices and current concerns of the international community. It also details the proposal for the new tax rules described above.

IV. RESEARCH ALLOCATION RULES SHOULD BE NEUTRAL

Congress failed to extend section 864(f) or to provide permanent allocation rules because it believed that the executive branch should adopt acceptable rules that appropriately balance concerns of both government and business. Some believe that Congress abdicated its responsibility to legislate when Representative Rostenkowski, Chair of the House Ways and Means Committee, indicated that the 1992 Revenue Bill would not contain a research allocation proposal to extend expiring section 864(f). Mr. Rostenkowski stated his committee's belief that "the Treasury Department should now resolve [the research expense allocation] controversy." He also advocated that the revised regulations reflect three goals, two of which were announced by President Bush in his fiscal year 1993 budget and the third of which had not been previously explored. The two goals announced by President Bush were to provide incentives to increase the overall performance of research and development activity by U.S. taxpayers and incentives to encourage the location of research within the United States. The third goal, which seemingly reflected the committee's awareness of the increasing internationalization of research activities, was that the regulations should not penalize taxpayers who "are required for business purposes to conduct significant amounts of R&D at foreign sites."

One may speculate whether Congress's failure to provide research
expense allocation rules resulted from its concern about the revenue impact or its genuine belief that such rules are more appropriately promulgated by the Treasury Department, which is charged with the responsibility to investigate and propose a solution in this area. Congressional inaction in 1992, provides an opportunity to examine the failure of any branch of the federal government to develop effective tax policy. Examination suggests two needs: promulgation of permanent research cost allocation and apportionment rules that fairly link research costs to the sources of income generated and elimination of arbitrary location-based allocation provisions.

A fair measurement of income derived by multinational businesses that conduct substantial research and development requires the apportionment of research costs to gross income, gross sales or assets of the enterprise. Expired section 864(f) (sixty-four percent allocation of U.S.-based research costs to domestic source income), the Clinton administration’s proposal (one hundred percent allocation of such costs to domestic source income) and, to a lesser extent, the 1977 regulations (thirty percent allocation of such expenses) are not based upon income measurement, but rather upon a desire to maximize the foreign tax credit for U.S. businesses. A rational tax system would allocate and apportion deductions on the basis of fair measurement of income and would reject as the determining factor maximization of the foreign tax credit.

Furthermore, the approaches taken in expired section 864(f) and the new proposal by the Clinton administration must also be rejected because they do not meet their objective of encouraging research activity in the United States. The most recent comprehensive Treasury Report concerning tax research incentives, published in 1983, indicated that the moratorium on the 1977 regulations (one hundred percent allocation of U.S.-based costs to domestic source income as under the Clinton plan) failed to meet that objective. It concluded that for a number of reasons the moratorium was an ineffective and haphazard method of increasing domestic research and

81. The Joint Committee on Taxation estimated that extension of the research allocation rules of sections 861(b), 862(b), 863(b), and 864(f) for fiscal years 1992-1996 would cause a total revenue loss of $3.9 billion. Description of Provisions Expiring in 1991 and 1992, supra note 77.

82. H.R. Conf. Rep. No. 841, 99th Cong., 2d Sess., at II-608. In the Chairman’s Mark, the Ways and Means Committee suggested deference to Treasury’s regulatory authority: The Internal Revenue Code generally articulates only the broad principles of how expenses reduce U.S. and foreign source gross income, leaving the Treasury Department to provide detailed rules for the task of allocating and apportioning expenses. Chairman’s Mark, supra note 79, at 22.

development. The Treasury study found that while the moratorium resulted in a reduction of U.S. tax liability, taxes were not of primary importance to U.S. taxpayers in determining the location of research and development investment. In addition, there was little evidence that the 1977 regulations resulted in a large shift of research and development offshore. Moreover, it projected that foregone tax revenues could exceed the dollar value of any increase in research activity.84

Another defect in the logic of the Clinton proposal and the similar approach under expired section 864(f) is that they fail to support and encourage research and development by start-up companies. The 1983 Treasury report indicated that because the moratorium only reduced the U.S. tax liability of firms with excess foreign tax credits, it had its most significant effect on large, mature multinationals. It found no benefit for the young “high technology” companies. As the administration’s proposal is identical to the moratorium rule, one must conclude that the administration’s proposal also will not favor the intended beneficiaries.

A serious threat to the competitive position of the United States is the transfer of technology or know-how offshore by U.S. companies to foreign subsidiaries at “below market” prices.85 That practice worsens the U.S. trade deficit, which reflects badly on the U.S. role in the world economy.86 Recent regulations under section 482 (according Treasury the authority to allocate income and deductions among related domestic and foreign parties in order to prevent manipulation of U.S. income) directly attack this problem.87 The Clinton administration’s proposal to treat all foreign source royalty income as passive separate limitation income for foreign tax credit purposes is another excellent weapon against wholesale transfers of U.S.-created technology abroad.88 If adopted, the proposal would counteract a current preference for licensing technology abroad by eliminating the effect of

84. The report contrasted direct government funding of a research project, resulting in a one dollar increase in research for each dollar of authorized funding, with the described result under the allocation rules. See 1987 R&D Hearing, supra note 7, at 42.
85. See, e.g., Westreco v. United States, T.C. Memo (CCH) 1992-561 (1992); Regs. §§ 1.482-1A, -2A.
86. Hufbauer, supra note 4, at 8-9.
87. Regs. §§ 1.482-1A, -2A; Prop. Regs. § 1.482-2(g). A different approach to the same problem was taken by the proponents of the Foreign Income Tax Rationalization and Simplification Bill of 1992. Section 304 of the Bill would have added new section 482(b) of the Code to require reporting of a minimum amount of taxable income (75% of the product of gross profits and an industry-wide profit percentage) by 25% owned foreign corporations. See Joint Comm. on Taxation, Explanation of H.R. 5720 (Foreign Income Tax Rationalization and Simplification Bill of 1992) 48-55 (Joint Comm. Print 1992) [hereinafter “1992 Bill”].
placing royalty income derived from the trade or business of a U.S. corporation in the same basket for foreign tax credit separate limitation purposes as other business income. Under the current rules, lower-taxed royalty income offsets higher-taxed business income and correspondingly increases the foreign tax credit available for all income in the overall business income basket.\(^{89}\) The research cost allocation rules proposed by the Clinton administration are not effective weapons against offshore technology transfers because they relate only to the location of research activities of U.S. taxpayers. Consequently, those rules should not be adopted to deal with a problem they cannot solve.

Another flaw in President Clinton's research cost allocation proposal and the expired section 864(f) rules is that they fail to provide similar treatment to similarly situated domestic and foreign taxpayers.\(^{90}\) Although foreign corporations with U.S. tax liabilities derived from the conduct of a U.S. trade or business could benefit from the favorable research cost allocation rules, those rules are not applicable.\(^{91}\) Discrimination against foreign taxpayers, however, is unwarranted and irrational for several reasons.\(^{92}\) First, a rule that purports to measure taxable business income, such as the rules governing allocation and apportionment of deductions, should be applied consistently to all income derived, whether by domestic or foreign persons.\(^{93}\) Second, if the research cost allocation rules are intended to encourage U.S.-based research, there is no rational reason to deny the

\(^{89}\) IRC § 904(d).

\(^{90}\) Expired section 864(f) did not apply to foreign taxpayers for purposes of determining income subject to U.S. tax. See supra note 43. President Clinton's proposal does not specify whether it covers foreign taxpayers with U.S. tax liabilities that may be offset by the foreign tax credit. See 1992 Bill, supra note 87. See also Stiglitz, supra note 58 at 399 ("[A] tax system is said to be horizontally equitable if individuals who are the same in all relevant respects are treated equally. The principle of horizontal equity is so important that it is, in effect, enshrined in the Constitution as the Fourteenth Amendment....").

\(^{91}\) See IRC §§ 864(c), 882.

\(^{92}\) Most U.S. bilateral treaties contain a nondiscrimination clause under which a national and resident of a treaty partner may not be subjected to taxation more burdensome than that imposed on a national or resident of the United States. Isenbergh, supra note 14, at 440-441. Foreign corporations that conduct business in the United States are subject to U.S. income tax on all income effectively connected with the business and are entitled to research expense deductions that reduce ultimate U.S. tax liability. Failure to permit foreign corporations to use the same research allocation rules as U.S. corporations might violate a treaty's nondiscrimination clause. See Sanford H. Goldberg & Peter A. Glicklich, Treaty-Based Nondiscrimination: Now You See It Now You Don't, 1 Fla. Tax Rev. 51, 86-88 (1992). Since the 1988 Technical and Miscellaneous Revenue Act, however, Congress has the authority to override such a treaty provision. Isenbergh, supra note 14, at 448-450.

incentive for foreign businesses. Indeed, if the national identity of the taxpayer controls and the U.S. rules are intended to encourage development by U.S. taxpayers, then the premise for the Clinton proposal and section 864(f)—that only U.S.-based research, and not all research wherever performed, by U.S. taxpayers is to be encouraged—is incongruous with a purported goal of encouraging development by U.S. taxpayers. Given their premise, those rules must be rejected because they do not achieve their goal of encouraging all research, including foreign-based research. Third, the government can point to no disadvantage in providing an incentive for U.S.-based research by foreign taxpayers other than the frustration of a national pride interest. As discussed above, the government’s interest in supporting U.S. ingenuity is outweighed by other important national and international interests.

The failure of the Clinton proposal to anticipate the growing importance of international goals in the development of technology also undermines its viability for the future. As noted in a recent Carnegie Commission report, the administration should seek ways to promote international cooperation in research and development and should reject a temptation to isolate U.S. activities:

Overall, U.S. international relations have suffered from the absence of a long-term, balanced strategy for issues at the intersection of science and technology with foreign affairs ... As the United States faces problems similar to those of other countries—say, in energy—collaboration will help to find better solutions. As the world’s scientific community pursues common aspirations on the great research frontiers—in physics and genetics, for example—improved communications will spur mobility and exchanges involving U.S participants as well as joint financing and planning of next-generation projects. As American openness and the tradition of an international process in science and engineering combine in U.S. global initiatives, the health of the American research and development enterprise itself will be strengthened. The private sector has often learned these lessons of interdependence more quickly than has the government.94

The Carnegie Commission also noted that the relatively large amounts of money spent by the U.S. government and the private sector compared to

other countries will not guarantee technological leadership without international cooperation. Just as government spending must acknowledge the importance of cooperation, tax policy also must anticipate that U.S. taxpayers, who are players in the world arena, possess business reasons to develop international relationships that may call for research activity outside U.S. borders. Tax policy should not sanction rules that penalize such taxpayers for conducting activities out of the United States.

Considering the disadvantages of the research allocation rules found in the Clinton proposal and the expired section 864(f) rules, this article proposes a different approach. The proposal is that the rules eliminate allocation and apportionment of research costs based on the location of research activities. The allocation provisions should attempt to measure income of all multinational businesses, whether domestic or foreign, by attributing research expenses to gross income or gross sales of the business. Unlike the 1977 regulations, the proposal would permit allocation on the basis of gross sales or gross income without limitation. An alternative basis for allocation suggested by the Treasury Department in its recent report on International Tax Reform would be the asset method employed under the current rules in which a taxpayer allocates interest expense to the source of income derived from the location of its assets (determined on the basis of asset or book value). That method of allocation is based upon a belief that research expense is fungible—attributable to all activities and property regardless of location. The Treasury Department supports the asset method of allocation, termed a “worldwide fungibility” approach, because “it could

95. The Commission noted:
Developed countries must seek exchanges about (and deals with) each other’s R&D. U.S. firms must seek alliances with foreign firms, while U.S. universities must make contacts with leading investigators around the world. Much of this focuses on the excellent work in Europe and Japan, and the Commerce Department has been active, for example, in stimulating private sector liaison for these most industrialized regions.

Id. at 26 (footnote omitted).

96. See supra text accompanying notes 25-29.


98. Regs. § 1.861-9T, -10, -10T. The asset method of allocating interest expense is available only for U.S. taxpayers and foreign individuals. Separate and more complicated rules apply to foreign corporations. See Regs. § 1.882-5; Prop. Regs. § 1.882-5. Regulations section 1.861-9T is based upon the principle that all money is fungible and that interest is attributable to all activities and property regardless of any specific purpose for incurring an obligation on which interest is paid. Consequently, interest deductions are considered related to all income producing activities and assets of the taxpayer. Interest expense of affiliated group members is allocated under the separate rules of Regulations section 1.861-11T.
better reflect the factual relationship of [research and development] expense to gross income. 99

The last alternative under the proposal would permit the taxpayer to establish any other reasonable method of allocation and apportionment consistent with other business practices. Similar rules have been employed in the regulations governing apportionment of costs of taxpayers that manufacture within the United States and sell outside of the United States or vice versa. 100 A significant benefit of this approach is that it provides the taxpayer with an opportunity to establish a business justification for allocation and apportionment.

Adopting the theory that similarly situated foreign and U.S. taxpayers should be treated similarly, the proposal would apply to all taxpayers for all purposes. Consistent application of the rules would avoid unjustified discrimination against foreign taxpayers and would accommodate the interest of multinational enterprises in locating research activities where they are most economically feasible. The proposal rejects special rules for U.S.-based research by U.S. taxpayers because the aims sought by such rules, proliferation of research in the United States and bolstering of the U.S. reputation for technological leadership, are anachronistic in today's global economy.

This article's proposal accommodates the more important international interests in efficiency, cooperation and technological development. As discussed above, the relatively weak interest of the U.S. government in promoting pride in United States creativity cannot be accomplished by the research allocation rules. Promulgation of the rules proposed by the Clinton administration would undermine more significant national interests in revenue maximization, fair income measurement and strengthened connections in the international community.

V. CONCLUSION

Current U.S. tax rules allocating research costs of multinational businesses are ineffective and outdated because they fail to fairly measure income, to support the business needs of international operations and to support the current trend of collaboration in the international community. For these reasons those rules should be rejected. The rules proposed by this article should be adopted because they provide neutral allocation rules that do not depend upon location of research activities or the national identity of the taxpayer and they do not impede collaborative research efforts of multinational businesses.

100. See supra note 74.