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THE ORIGINAL SIN: COST SHARING IN THE UNITED STATES

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January 23, 2025

This paper explores a simple thesis: that the "cost-sharing" rules of the United States are at the core of most of today's problems in the field of international tax policy. We will explain, with minimum jargon, what U.S. cost sharing has been and what it currently is, how it has engendered so many dubious outcomes, and why it seems to have done so. We argue that U.S. cost sharing is largely responsible for the chaotic state of affairs regarding taxation of cross-border income. The lesson for U.S. policymakers today is a simple one: Do not sit on your taxing rights.

I.

International tax policy is undergoing fundamental change for the first time in nearly a century. The subject has even gained popular currency, capturing the attention of the general news media and the broader public.

International taxation deals with the allocation of taxing rights among nations: when economic activity crosses borders, which country or countries are justified in taxing the resulting profit, and in what amount? Under the auspices of the League of Nations in the 1920s, the significant trading nations of the day, including the United States, arrived at a consensus: taxing rights over business income would generally lie with the country where the taxpayer earning the income had its headquarters, or "residence." If, however, the taxpayer had a sufficiently robust presence in another jurisdiction, either physically or by reason of persons acting on its behalf, primary taxing rights relating to income attributable to that presence would rest with that jurisdiction, the "source" country. If both countries claimed jurisdiction to tax, the source country tax would come first, with the residence country undertaking to alleviate international double taxation by exempting the income or according a foreign tax credit for the source country tax. This division of authority aimed to ensure that profit would be subject to tax only once, and to facilitate the expansion of global trade.

Subject to occasional tweaks around the edges, the consensus largely held for the next ninety years. The exponential growth in world trade during that period suggests there was some merit to the underlying theory. But in the past ten or so years, the consensus has begun to unravel.

DOC# 3188918-10/18/24

In 2013 the Organisation for Economic Co-operation and Development ("OECD"), in conjunction with G20 countries, initiated a project to address the erosion of the global income tax base and the shifting of profits from high-tax to low-tax or no-tax jurisdictions. This "base erosion and profit shifting" or BEPS project consisted of fifteen separate "action items" dealing with a variety of international tax issues.[1] The program was pursued with impressive speed and generated a prodigious volume of published material. It culminated in a series of final reports in 2015, certain recommendations of which were incorporated into the bilateral income tax treaties between ratifying countries through a multilateral instrument.[2] The motivating principle for BEPS and the overarching theme of the resulting reports was that profits should be taxed where value is created, a concept understood to refer to the jurisdiction where economic activity producing the profits occurred.

"Action 1" of BEPS sought to identify the special tax challenges of the digital economy and develop detailed options for addressing those challenges.[3] The project achieved the first objective but not the second. Thereafter, the OECD, with the political support of the G20, redoubled efforts through a special Task Force on the Digital Economy, originally comprising only OECD member states but evolving into a nearly 140-member "Inclusive Framework."

Meanwhile, the European Commission instituted a proceeding in 2014 involving Apple Inc., asserting in a 2016 decision that the Government of Ireland had wrongly ceded some €13 billion of income tax to the company through inappropriate tax rulings.[4] Similar proceedings were begun against several other (mostly U.S.) companies, including McDonalds, Amazon, and Starbucks.[5] The Commission asserted that certain member countries of the European Union had impermissibly accorded "state aid" to these companies.

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[1] OECD (2015), Explanatory Statement, OECD/G20 Base Erosion and Profit Shifting Project, OECD. https://www.oecd.org/en/publications/beps-project-explanatory-statement_9789264263437-en.html.

[2] OECD, BEPS Multilateral Instrument – Information Brochure (Jan. 2023), https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/beps-mli/multilateral-instrument-beps-tax-treaty-information-brochure.pdf/_jcr_content/renditions/original./multilateral-instrument-beps-tax-treaty-information-brochure.pdf; OECD, Signatories and Parties to the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (Oct. 2, 2024), https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/beps-mli/beps-mli-signatories-and-parties.pdf.

[3] OECD (2015), *Addressing the Tax Challenges of the Digital Economy, Action 1 — 2015 Final Report*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris. *http://dx.doi.org/10.1787/9789264241046-en*

[4] Commission Notice, 2014 O.J. (C 369/22) 57.

[5] Dominic Robertson & Emma Game, *Tax rulings and state aid: where are we now?,* FINANCIER WORLDWIDE MAGAZINE (Dec. 2017), https://www.financierworldwide.com/tax-rulings-and-state-aid-where-are-we-now#.XQkS-MR7laR.

In 2017 the United States Congress began work on a tax bill destined to make radical changes to rules and principles that had governed U.S. taxation of cross-border activity for decades. The resulting Tax Cuts and Jobs Act (TCJA), signed into law on December 22, 2017,[6] is a massive statute, and its international provisions are among the most surprising and far-reaching. They include a "base erosion and anti-abuse tax" (BEAT) penalizing large U.S. companies for making payments to foreign affiliates that can be used to reduce U.S. income and the U.S. companies' tax liabilities. Other TCJA provisions address the taxation of profits earned by foreign corporations controlled by U.S. persons. One such provision imposed a modest level of taxation on the huge volume of untaxed earnings that such controlled foreign corporations had amassed in prior years and with respect to which U.S. tax had been "deferred" pending repatriation to the United States — a repatriation that was elective and that could be indefinitely postponed with no adverse tax consequences.[7] A second provision introduced a complex minimum tax on "global intangible low-taxed income" (GILTI), defined to comprise most post-TCJA earnings of these same controlled foreign corporations, and an exemption for certain of their other earnings.[8]

All this activity has been accompanied by celebrated legislative hearings in several countries and a variety of proposals to change laws and treaties to deal with what is sometimes perceived as the inappropriate avoidance of tax by multinational enterprises (MNEs). Corporations stand widely accused in the media and on the political stage of not paying their "fair share" in the markets where they operate.[9] The international tax area has attracted a much higher degree of public fascination and concern than it had previously known.[10]

A major thrust in the debate appears to be that, in the eternal battle for taxing rights between the residence country and the source country, with all countries falling in both categories but in widely disparate proportions, the interests of the residence country have been granted unjustifiable primacy. It has not gone unnoticed that important residence countries — the

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[6] Budget Fiscal Year, 2018, PL 115-97, December 22, 2017, 131 Stat 2054.

[7] 26 U.S.C. § 965 (2018).

[8] *Id.* § 951A.

[9] *See* Laura Davison, *Rubio's Corporate Investment Plan Could Make Him Popular on Left*, BLOOMBERG LAW (2019) https://www.bloomberglaw.com/product/blaw/document/X516CD4000000?bna_news_filter=true&jcsearch=BNA%25200000016abd1ed1c2a56bbdbe09700000#jcite.

[10] *See* Joseph J. Thorndike*, The Durability of A Dysfunctional Tax: Public Opinion and the Failure of Corporate Tax Reform,* 21-Sum KAN. J.L. & PUB. POL'Y 347, 347 (2012).

United States in particular — have often failed to exercise the taxing rights accorded to them. It is asserted that recalibration is necessary to fit the needs of a modern world. From this perspective, the GILTI rules are best understood as an emphatic assertion of residence jurisdiction intended to demonstrate that, as a substantial exporter of capital, the United States will no longer acquiesce in the generation of large amounts of income not effectively taxed by any country.

But the United States' reassertion of residence jurisdiction came too late to stop the unraveling of the international tax consensus. The scope of the follow-on work to BEPS Action 1 expanded dramatically irrespective of the TCJA. The initial focus of the Inclusive Framework was the taxation of enterprises whose business models included heavy reliance on either digital projects or services or a digital means of delivering them. That focus ballooned into a "two-pillar solution" to a broader set of perceived ills. Pillar One would allocate some business profits away from both residence and source countries to a third stakeholder, the "market" country, and would also attempt to streamline the taxation of marketing and distribution activities. Taking its inspiration from GILTI, Pillar Two would impose a global minimum tax through a series of mechanisms more complex than, and in some respects incompatible with, the U.S. GILTI rules. As of this writing, the fate of Pillar One remains highly uncertain, but Pillar Two has become a reality, at least outside the United States. And in September 2024, in a decision arguably directly contrary to its own precedent, the Court of Justice of the European Union (CJEU) handed the Commission an approximately €13 billion win in its state aid case against Apple.

We trace these disparate strands of international tax policy and enforcement activity to a common source — the cost-sharing rules adopted by the United States in the 1960s and refined multiple times in the intervening years.[11] Cost sharing represents the single most ill-advised and poorly implemented tax policy that the United States has ever pursued. It is responsible for the loss of an enormous amount of U.S. tax revenue. It has generated reactions and counter-reactions among U.S. trading partners, developing countries, the OECD, and the European Commission. Yet, cost sharing and the role it has played seem little understood. Here, we

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[11] This article focuses on cost sharing. It is very easy to confuse this concept and its development in the United States with the similarly denominated cost contribution rules developed by the OECD. Those rules, like most of the OECD Transfer Pricing Guidelines, are drawn from U.S. transfer pricing rules and, in many respects, were drafted by the very same persons that prepared the U.S. rules. Yet OECD cost contribution has historically been a very different and more benign set of rules than U.S. cost sharing. Their coverage is wider. The OECD rules pertain not only to the development of intangible property, as do the U.S. cost-sharing rules, but also to sharing the cost of services. More importantly (and somewhat inexplicably), the OECD rules appear never to have engendered the expatriation of valuable intangible assets that has characterized U.S. cost sharing.

endeavor to remedy that lack of understanding, in the hope that the current crop of policymakers can overcome, and learn from, their forebears' misjudgments.

II.

A.

"Cost sharing" in U.S. tax law refers to an arrangement among two or more parties to share the expense of developing technology or other intangible property in exchange for shared ownership of successful results of the development effort. Cost sharing is, in some respects, analogous to a joint venture, but unlike in a typical joint venture, only costs are shared, not profits. The parties may separately commercialize the developed intangibles and thus realize different economic outcomes from the development effort.

Cost sharing as a business arrangement predates the first regulations addressing its tax consequences. Although cost sharing seems to be relatively uncommon among economic actors operating at arm's length, it does offer potential commercial advantages. Research and development ("R&D") spend does not always, or immediately, yield technology that can be commercialized. A seemingly brilliant, novel idea may not translate into reality, and even if it does, it may not achieve economic value. Cost sharing spreads the risk of failure among multiple parties. For successful R&D, it obviates the need for potentially complex licensing and royalties. Had only one party funded the research activity, the funding party would typically own the resulting technology itself; other parties would be obliged to purchase the technology, or the right to use it, at a market price, which might be considerably higher than a proportionate share of the R&D costs. In a cost-sharing arrangement, all participants immediately acquire ownership of the results of a successful development project.

Notably, the cost-sharing concept does not necessarily require that all participating parties undertake R&D functions within the arrangement's scope. Indeed, it is not necessary for any participant to have a research staff; the participants can jointly fund research conducted by a third party under contract. The bearing and sharing of risk, not the performance of development functions, is the essence of a cost-sharing arrangement.

The origin of cost sharing as a tax concept dates from 1966, when the Treasury and Internal Revenue Service ("IRS") proposed new regulations under section 482 of the Internal Revenue

Code.[12] Section 482 deals with the reporting of income and expense for tax purposes by commonly controlled parties, generally a corporation and its subsidiaries. More particularly, section 482 and the regulations that interpret it allow for the verification and, if necessary, rectification, of the pricing of transactions among such parties.

When commonly controlled parties are liable for different tax rates or other tax consequences, for example because they are subject to different rates of tax in different countries, they may be incentivized to set prices at which they transact with one another so as to minimize the aggregate tax due. A buyer or service recipient in a high-tax jurisdiction may choose to pay more to a related seller or service provider in a low-tax jurisdiction. The buyer or service recipient will claim a larger deduction or acquisition cost, reducing income taxable at the higher rate, and more income will be taxed to the seller or service provider at the lower rate. The economic results of the transaction remain "in the family." Section 482 authorizes U.S. tax officials to guard against such tax outcomes.

Although section 482 has since been twice amended, in 1966 it consisted of only a single sentence authorizing the Internal Revenue Service to reallocate income or expense among controlled parties as necessary "to prevent evasion of taxes or clearly to reflect the income" of each such party. Treasury regulations translate this succinct, and extremely broad, grant of authority into particularized guidance. The clear reflection of income standard has long been recast to mean that transactions between related parties should produce results consistent with those that would be realized between unrelated parties operating in the market, or "arm's-length" results.[13]

The 1966 proposed regulations provided the first specific guidance on the application of arm's-length principles to cost-sharing arrangements between controlled parties. At the time, the arrangements existed in various forms, and Treasury and the IRS reportedly desired to accommodate and, to an extent, incorporate existing practices in regulations.[14] The proposed regulations bifurcated the world of controlled-party cost sharing into "*bona fide*"

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[12] Allocation of Income and Deductions Among Taxpayers; Determination of Sources of Income, 31 Fed. Reg. 10394 (proposed Aug. 2, 1966).

[13] Treas. Reg. § 1.482-1(b)(1).

[14] *See* OECD Comm. on Fiscal Affairs, *Transfer Pricing and Multinational Enterprises* ¶ 109 (1979); *but see* Ronald A. Dye, *Cost-Sharing Agreements*, KELLOGG INSIGHTS (Apr. 1, 2008), *available at* https://insight.kellogg.northwestern.edu/article/cost_sharing_agreements (citing conversations with IRS personnel, stating that the cost-sharing regulations were introduced "to eliminate disagreements between the IRS and taxpayers over what constitutes a reasonable assessment of the market value of royalty payments for transferred intangibles").

arrangements, which would generally be respected, and other arrangements that the IRS could recharacterize as transfers of intangible property requiring payment of an arm's-length (*i.e.*, market) royalty or acquisition price.[15]

Under the proposed regulations a controlled party cost-sharing arrangement would qualify as *bona fide* only if it satisfied various enumerated criteria: (i) the arrangement had to be memorialized in a written agreement among the participants; (ii) no participant could be in the business of developing intangible property, and the intangible property to be developed had to be intended for use in connection with the active conduct of each participant's business; (iii) the written agreement had to reflect a good faith effort to allocate to each participant its "full share" of costs and risks; (iv) the agreement had to specify the nature and extent of each participant's interest in any intangible property produced, including residual rights therein, and the method for determining these interests; (v) the agreement had to commit all participants to the sharing of costs regardless whether any intangible property is ultimately produced; and (vi) the parties' conduct had to be consistent with the agreement.[16]

In many respects, the proposed regulations framed the *bona fide* cost-sharing regime as an administrative safe harbor under which controlled-party arrangements would be accepted if they satisfied specific requirements, irrespective of whether the arrangements otherwise satisfied an arm's-length standard. However, two of the requirements appeared to tether the regime to that standard.

First, a participant's "full share" of the costs and risks was defined as "equal to the share of costs and risks that an uncontrolled party would have borne to acquire the same interest in the same property under the same circumstances," which the proposed regulations equated to a share proportionate to the participant's relative prospective benefits from the arrangement.[17] The reference in the proposed regulations to the terms on which an uncontrolled party operating under the "same" circumstances would acquire the "same" interest in the "same" property suggests that actual practices of unrelated parties should serve as a benchmark.

Second, the costs required to be shared in a *bona fide* cost-sharing arrangement included not only direct and indirect costs associated with the development effort, but also

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[15] Prop. Reg. 1.482-2(d)(4)(i), 31 Fed. Reg. 10394, 10399 (Aug. 2, 1966).

[16] Prop. Reg. 1.482-2(d)(4)(ii)(*a*), (*b*), (iv), 31 Fed. Reg. 10394, 10400 (Aug. 2, 1966).

[17] Prop. Reg. § 1.482-2(d)(4)(iv), 31 Fed. Reg. 10394, 10400 (Aug. 2, 1966).

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> [a]n amount equal to the arm's-length value of the use of any intangible property of a party to the arrangement which is made available by it for use in connection with the activities undertaken pursuant to the arrangement and which is likely to contribute to a substantial extent in the production of intangible property.[18]

Here again, the requirement to pay "arm's-length value" linked the cost-sharing regime to what uncontrolled parties would do in the same or similar circumstances.

As this second requirement reflects, cost sharing is not used exclusively for "blue sky" or "green field" research in which participants start from scratch to develop new technology or other intangible property. More often, whether or not participants are controlled, one or more participants already owns technology similar or complementary to the technology that is to be jointly developed. Such pre-existing technology will be leveraged for, and may contribute meaningfully to, the joint development activity. For this reason, the 1966 proposed regulations required that the value of the pre-existing technology be shared along with future R&D costs. Later iterations of the regulations refer to payment for use of another cost-sharing participant's pre-existing intangibles as a "buy-in,"[19] and to the contribution of those intangibles and payment therefor as a "platform contribution transaction" or PCT.[20]

Commentators criticized the asserted complexity and inflexibility of the 1966 proposed regulations, opining that the regulations' rigid requirements would be challenging, and that the IRS would use the regulations as "a club . . . to induce favorable settlements."[21] The buy-in requirement, in particular, was viewed as prohibitive as a practical matter because it required valuation of pre-existing intangible property,[22] a task that has been and remains one of the most heavily disputed areas of all tax law, and certainly of transfer pricing.

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[18] Prop. Reg. § 1.482-2(d)(4)(iii)(*a*)(*3*), 31 Fed. Reg. 10394, 10400 (Aug. 2, 1966).

[19] T.D. 8632, 60 Fed. Reg. 65553, 65563 (Dec. 20, 1995).

[20] Treas. Reg. § 1.482-7(b)(1)(ii).

[21] James S. Eustice, *Tax Problems Arising From Transactions Between Affiliated or Controlled Corporations*, 23 TAX L. REV. 451, 510, 512 (1968); *see also* James S. Eustice, *Tax Problems Arising From Transactions Between Affiliated or Controlled Corporations*, 24 TAX L. REV. 101, 110 (1968) (noting "strong taxpayer criticisms of impracticability and unworkability").

[22] S.M. Frolich, *Section 482 and Its Effects on International Business Transactions*, 13 ANN. TAX CONF. 27, 33 (1967) ("For companies having extensive research and development activities, it will be extremely difficult to determine the value of previously developed intangibles, and to the extent that this cannot be done presumably the regulations preclude the use of the cost-sharing arrangement procedures.").

Perhaps in answer to these complaints — the administrative record is silent on this point[23] — final regulations issued in 1968 dramatically simplified and shortened the cost-sharing provisions.[24] In general, for a cost-sharing arrangement to qualify as *bona fide*, its "terms and conditions [had to] . . . be comparable to those which would have been adopted by unrelated parties similarly situated had they entered into such an arrangement," and the participants' relative cost shares had to "reflect[] an effort in good faith . . . to bear their respective full shares of all the costs and risks of development on an arm's-length basis."[25] The 1968 regulations omitted the discussion in the proposed regulations of which costs had to be shared and how the participants' "arm's-length" shares of R&D costs should be determined. They made no reference to a buy-in requirement. In a press release issued coincident with the final regulations, Treasury did not explain its about-face but merely noted that "[d]etailed rules" for cost sharing had "been eliminated" in favor of "a concise statement of general rules based on arm's-length standards."[26]

Commentators viewed the 1968 cost-sharing regulation as a *de facto* administrative safe harbor,[27] albeit one with ill-defined contours.[28] Yet, the regulation explicitly required that a cost-sharing arrangement's "terms and conditions . . . be comparable to those which would have been adopted by unrelated parties similarly situated had they entered into such an arrangement."[29]

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[23] The IRS responded to the authors' FOIA request concerning the 1966 proposed regulations and 1968 final regulations with reams of material, none of it pertinent to cost sharing.

[24] *See* T.D. 6952, 33 Fed. Reg. 5848 (Apr. 16, 1968).

[25] T.D. 6952, 33 Fed. Reg. 5848, 5854 (Apr. 16, 1968) (also requiring a written agreement).

[26] Treasury Department Release F-1217, April 16, 1968, 687 CCH ¶ 6740.

[27] *See* Thomas E. Jenks, *Treasury Regulations Under Section 482*, 23 TAX LAWYER 279, 304 (1969); Stanley S, Surrey, *Reflections on the Allocation of Income and Expenses among National Tax Jurisdictions*, 10 LAW & POL'Y INT'L BUS. 409, 426 (1978).

[28] James S. Eustice, *Tax Problems Arising From Transactions Between Affiliated or Controlled Corporations*, 24 TAX L. REV. 101, 110 (1968) ("The new approach is certainly more flexible than that of the initial proposals, but the only problem is that matters are now so flexible that it is well nigh impossible to determine whether a particular cost sharing arrangement satisfies the new standard of *bona fide* arm's length arrangement.") Apparently anticipating concerns about the regulation's vagueness, the Treasury press release foreshadowed the establishment of an advance ruling procedure for cost-sharing arrangements that aspired to "*bona fide*" status. Treasury Department Release F-1217, April 16, 1968, 687 CCH ¶ 6740. When the IRS established such a procedure for advance approvals of transfer pricing arrangements ("advance pricing agreements" or APAs) in 1991, it specifically provided for rulings on *bona fide* cost-sharing arrangements. Rev. Proc. 91-22, 1991-1 C.B. 526.

[29] T.D. 6952, 33 Fed. Reg. 5848, 5854 (Apr. 16, 1968).

In light of the broad discretion afforded by the statute, Treasury and the IRS could have opted for a more concrete, objective, and narrow safe harbor, within the scope of which they would refrain from exercising their adjustment authority irrespective of whether a particular arrangement would otherwise qualify as arm's length. Instead, they elected to treat cost sharing as simply another category of commercial transaction, to be compared with arrangements concluded by similarly situated uncontrolled taxpayers. This policy decision has had far-reaching consequences for the IRS' ability to police cost-sharing arrangements in the ensuing decades. Regardless of whether any cost sharing agreement among uncontrolled parties can be found, there appear to be none involving intangible property of the very highest value. No comparable arrangements among similarly situated uncontrolled taxpayers exist for the most economically significant cost-sharing arrangements.

Consider the counterfactual: If there were no special regulatory regime for cost sharing, arrangements would be evaluated under the regulations generally governing licenses and transfers of intangible property. These rules require the payment of a market price — typically dependent on *value*, not cost. Had Treasury and the IRS established a safe harbor for cost sharing rather than treating it as an arm's length method, they could have strictly defined (and redefined) the requirements they wished taxpayers to observe. To obtain the benefit of transferring rights in intangible property at cost, companies would have been obliged to structure their arrangements to IRS specifications. By treating cost-sharing as an arm's length method, Treasury and the IRS adopted empirical evidence of market behavior — a largely non-existent and in any case inherently malleable target — as the benchmark against which the validity of cost-sharing arrangements would be judged. The choice had both positive and negative implications in the case law: a company could defend its cost-sharing structure by pointing to an arrangement among arm's-length parties and arguing that the arrangement was comparable to its own, but Treasury and IRS arguably could not impose conditions on cost-sharing arrangements that were not observable at arm's length.

B.

Eleven years after issuance of the 1968 regulations, an OECD Committee on Fiscal Affairs Report noted that, while "not very common," cost sharing had "been used over recent years by several large MNEs with extensive and costly research activities undertaken on a worldwide basis."[30] These MNEs reportedly believed cost sharing afforded each participant "a better chance to get access to the benefits from research programmes of a large magnitude in return

[30] OECD Comm. on Fiscal Affairs, *Transfer Pricing and Multinational Enterprises* ¶ 102 (1979).

for reimbursing only a relatively small share of the costs," and offered a "simpler and more equitable method than intra-group licensing."[31] Cost-sharing arrangements ensured that costs were either "financed in advance or reimbursed rapidly" and promoted cooperation between participants conducting the research and those providing funding.[32]

As of 1979, only the United States had had meaningful experience with cost-sharing arrangements.[33] Indeed, most other major jurisdictions did not have special rules applicable to such arrangements (and many had only primitive rules relating to transfer pricing generally).[34] According to the OECD Report, the United States' experience had been largely positive.[35] Cost-sharing arrangements did "not appear to have opened up avenues for tax avoidance" and presented "[n]o particular problems."[36]

The OECD Report and the U.S. officials presumably consulted in drafting it proved too sanguine. Cost-sharing arrangements in existence as early as the 1980s effected the transfer of economic ownership of intangible property developed in the United States to foreign affiliates at cost rather than a market price.[37] Indeed, as commentators had long observed, cost sharing represented a highly desirable alternative to a sale or license as a means of transferring intangible property offshore: If the parties' pricing was wrong, rather than facing allocations of income "on the basis of the *value* of the rights transferred" (including a profit element), as would occur in the case of a sale or license, companies would be required to accept allocations

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[31] *Id.* ¶ 104..

[32] *Id.*

[33] *Id.* ¶ 109.

[34] *E.g.*, Bureau d'Etudes Juridiques et Fiscales Francis Lefebvre, *France: Transfer Pricing Within Multinational Enterprises and Article 57 of the French General Tax Code*, 80-9 TAX MGM'T INT'L J. 9, 11 (1980); Jakob Stobl, *et al*., *Germany: German Tax Audits of Foreign Subsidiaries in Germany – Practice and Experience*, 80-9 TAX MGM'T INT'L J. 28, 31 (1980); *but see* Jon E. Bischel, *Intercompany Transfers of Technology: A Comparative Tax Analysis*, 5 INT'L TAX J. 181, 193 (1979) (noting that Canada had adopted rules specifically governing "cost-mutualization agreements between related parties").

[35] OECD Comm. on Fiscal Affairs, *Transfer Pricing and Multinational Enterprises* ¶ 104 (1979).

[36] *Id.* ¶ 109; *cf.* I.R.S. Priv. Ltr. Rul. 81-11-103 (Dec. 18, 1980) (analyzing research and development tax credit and income sourcing issues arising from a U.S. company's participation in a cost-sharing arrangement with its foreign subsidiaries, without considering whether the arrangement was a *bona fide* cost-sharing arrangement).

[37] *See, e.g.*, I.R.S. Priv. Ltr. Rul. 8643006 (July 23, 1986) (foreign parent obtained ownership of, or an exclusive, near-worldwide license of intangibles developed by its U.S. subsidiaries); I.R.S. Priv. Ltr. Rul. 8111103 (Dec. 18, 1980) (cost sharing arrangement provided for common, coextensive and overlapping ownership of all intangible property developed by a U.S. company and its foreign subsidiaries).

made "on the basis of relative *costs* incurred in the development of the property."[38] "The fundamental tax advantage associated with cost-sharing agreements is that (estimated) market prices get replaced by incurred costs."[39]

An independent business would weigh the benefits of entering into a cost-sharing arrangement against the drawbacks: if the R&D effort succeeds, the other party will co-own the results, and paying cost for failed R&D is not obviously preferable to paying market value for successful technology. For a MNE, however, the tax advantage is almost too good to pass up. A U.S. company can contribute funds it might have otherwise used for R&D to a new foreign subsidiary, ideally located in a no- or low-tax jurisdiction. That contribution is non-taxable for U.S. purposes. Under a cost-sharing arrangement with the U.S. company, the subsidiary can then fund a portion of the U.S. company's R&D — effectively using the U.S. company's own money — in exchange for the non-U.S. rights to commercialize any resulting intangible property. Future profits from non-U.S. exploitation of the resulting intangibles, such as through sales of products, would accrue in the new foreign subsidiary, where they would bear little or no foreign tax — and generally no U.S. tax prior to repatriation, under pre-2018 law.

The benefits of such a strategy were not lost on U.S.-parented MNEs and their tax advisors, especially in the computing technology industry that emerged in the 1980s. Apple Inc. appears to have been a, if not the, pioneer.

Apple first entered into a cost-sharing arrangement with at least one Irish affiliate, Apple Operations Europe ("AOE"), long before the phenomenal success of iPods, iPads, and iPhones, in December 1980, the same month in which its stock was first offered for sale to the public.[40] During hearings before the Senate Permanent Subcommittee on Investigations ("PSI") in 2013, Apple could locate no historical record of the business purpose for this arrangement or the accompanying agreement under which AOE received an exclusive, worldwide, royalty-free

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[38] James S. Eustice, *Tax Problems Arising From Transactions Between Affiliated or Controlled Corporations*, 23 TAX L. REV. 451, 510 (1968) (emphasis in original).

[39] Ronald A. Dye, *Cost-Sharing Agreements*, Kellogg Insights (Apr. 1, 2008), *available at* https://insight.kellogg.northwestern.edu/article/cost_sharing_agreements. This advantage persists even when a buy-in payment is made for pre-existing intangible property contributed to the cost-sharing arrangement because the payor's post-buy-in payments are still reduced as compared with a straight royalty or sale. *Id.*

[40] AOE was then known as Apple Computer Limited. Commission Decision 17/1283, 2017 O.J. (L 187) 1, ¶ 61 (EC). Publicly available information is inconsistent as to whether and Apple Sales International ("ASI"), an Irish subsidiary of AOE, was an original party to that arrangement or was added in 1999. *Compare Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 168 (2013), *with* Commission Decision 17/1283, 2017 O.J. (L 187) 1, ¶ 117 (EC).

license to use (and sublicense) Apple's trade names, trademarks, trade secrets, and patents in Western Europe (later expanded to all of Europe, the Middle East, and Africa).[41] Apple further told the Senate PSI that, to the best of its knowledge, no buy-in payment was made by AOE in connection with the 1980 arrangement, although AOE had since made buy-in payments and engaged in PCTs in other circumstances.[42]

Apple's cost-sharing agreement with AOE was amended at least 16 times after 1980, including in or around 2008 and in 2013,[43] but its substance remained largely unchanged.[44] By reason of this agreement, AOE and its wholly owned Irish subsidiary, ASI, gained ongoing access to the technological innovation emanating from Apple's Cupertino, California headquarters and paid for a share of Apple's R&D costs. AOE and ASI used the intangibles thus acquired to manufacture (directly or through third-party contract manufacturers) and sell Apple products worth hundreds of billions of dollars, earning profits entirely disproportionate to the cost-sharing payments they made to Apple. Over the 2009-2012 period, for example, ASI made approximately $5 billion in cost-sharing payments to Apple and earned approximately $74 billion of income.[45] Over the same period, Apple itself paid around $4 billion of intangible development costs and realized approximately $79 billion of profits. Only Apple performed R&D. Thanks to clever arbitrage of U.S. and Irish laws regarding corporate tax residency, both ASI and its parent, AOE, claimed no tax residence anywhere.[46] The billions they earned bore little or no income tax — in any country.

According to a report produced by the Senate PSI, "Apple's transfer of the economic rights to its intellectual property to Ireland has no apparent commercial benefit apart from its tax

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[41] *See Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 249 (2013).

[42] *Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 249 (2013). Publicly available evidence suggests that the IRS did not enforce a buy-in requirement for such early cost sharing arrangements. *See, e.g.*, *Seagate Technology, Inc. v. Commissioner*, 102 T.C. 149, 305-14 (1994) (making no mention of a buy-in payment or requirement where, in litigation concerning Seagate's 1981-1987 tax years, the IRS alleged Seagate's Singaporean affiliate should have borne a larger share of costs under a 1985 cost sharing arrangement).

[43] Commission Decision 17/1283, 2017 O.J. (L 187) 1, ¶ 117 (EC).

[44] *Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 38 (2013) (Statement of Peter Oppenheimer, CFO, Apple Inc.).

[45] *Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 180 (2013).

[46] *Id.* at 171; Commission Decision 17/1283, 2017 O.J. (L 187) 1, 52 (EC).

effects."[47] Yet, according to Apple, its cost-sharing arrangement with AOE and ASI "is regularly audited by the IRS and complies fully with all applicable Treasury regulations."[48] The authors have no reason to doubt the truth of this statement.

To be sure, Apple's adoption of cost sharing in 1980 implies some prescience. At the time, subject to exceptions for intangibles used in a U.S. business or in connection with goods to be manufactured, sold, or consumed in the United States, a U.S. corporation could transfer intangible property to a foreign corporation in a nontaxable "reorganization" transaction if it first obtained IRS "preclearance."[49] The preclearance process entailed demonstrating to the IRS' satisfaction that the proposed transfer was not "in pursuance of a plan having as one of its purposes the avoidance of federal income taxes," and generally that preexisting U.S. taxing rights over as-yet untaxed earnings and gain would be preserved in the transaction.[50] Thus, in 1980, Apple might have been able to transfer to AOE free of U.S. income tax some or all of the intangibles that AOE acquired through cost sharing—although, unlike cost sharing, such an outright transfer would not have provided a simple, tax-free mechanism for AOE to continue funding Apple's U.S. R&D activities or for automatic joint ownership of the results.

In 1984, however, the rules changed.[51] Congress identified the existing preclearance framework for outbound intangibles transfers as having encouraged abuse.

> In light of [the IRS'] . . . favorable ruling policy, a number of U.S. companies adopted a practice of developing patents or similar intangibles at their facilities in the United States, with a view towards using the intangibles in foreign operations. When these intangibles were ready for profitable exploitation, they were transferred to a manufacturing subsidiary incorporated in a low-tax foreign jurisdiction (or in a high-tax jurisdiction that offered a tax holiday for specified local manufacturing operations). By engaging in such practices, the transferor U.S. companies hoped to reduce their U.S. taxable income by deducting substantial research and experimentation expenses associated with

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[47] *Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 180-81 (2013).

[48] *Id.* at 131 (2013).

[49] Rev. Proc. 68-23, 1968-1 C.B. 821.

[50] 26 U.S.C. § 367 (1954); Peter M. Daub, *Section 467 Adrift: Old Statute, New Applications*, 151 Tax Notes 1207, 1210-1213 (May 30, 2016) (discussing the history and policy of section 367 prior to 1984).

[51] Deficit Reduction Act of 1984, P.L. 98-368, § 131(b).

> the development of the transferred intangible and, by transferring the intangible to a foreign corporation at the point of profitability, to ensure deferral of U.S. tax on the profits generated by the intangible. By incorporating the transferee in a low-tax jurisdiction, the U.S. companies also avoided any significant foreign tax on such profits.[52]

For 1985 and later years, a U.S. corporation that transfers intangible property to a foreign affiliate in what otherwise would be a nontaxable reorganization is taxed as if the property had been sold or licensed for fair market value.[53]

Thereafter, other U.S. technology companies joined the cost sharing bandwagon to transfer intangibles offshore. The Microsoft cost-sharing arrangement that came under Senate PSI in 2012 was entered into much later than Apple's, in or around 2005.[54] Under this arrangement, Microsoft and affiliates located in Puerto Rico, Ireland, and Singapore shared the costs of the Microsoft group's worldwide R&D expense roughly in proportion to their respective sales, in exchange for full access to resulting technology.[55] As of 2012, about 85% of the R&D was performed in the United States.[56]

Each of the three non-U.S. affiliates made a multi-billion dollar buy-in payment at the inception of the cost-sharing arrangement for access to Microsoft's pre-existing intangibles.[57] And each bore substantial intangible development costs in exchange for the rights it acquired through cost sharing: in 2011, for example, the Puerto Rican affiliate paid $1.9 billion to Microsoft, while the Irish and Singaporean entities paid $2.8 billion and $1.2 billion, respectively.[58] Notwithstanding having come to cost sharing late in the game and having adhered to the buy-in requirement, Microsoft still benefited materially from the arrangement. In 2011, when the headline U.S. corporate income tax rate was 35%, the profits of the Puerto Rican, Irish, and Singaporean cost-share participants, who were responsible for all of the group's retail sales,

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[52] H.R. Rep. No. 98-432, at 1316 (1984); S. Prt. 98-169, Vol. I, at 361 (1984).

[53] 26 U.S.C. § 367(d).

[54] *Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 22 (2013) (statement of Stephen E. Shay, Professor, Harvard Law).

[55] *Id.* at 19-20.

[56] *Id.* at 19.

[57] *Id.* at 20 n.69.

[58] *Id.* at 20-22.

including in the United States, were taxed only abroad and at effective rates of 1.02%, 7.3%, and 0.3%, respectively.[59]

Amazon.com, Inc. escaped Senate PSI scrutiny but did attract the attention of the IRS, which challenged both the buy-in payments made and intangible development costs borne by Amazon's Luxembourg subsidiary, with which Amazon entered into a cost-sharing arrangement in 2005.[60] In a series of transactions in 2005 and 2006, Amazon separately transferred three groups of pre-existing intangibles — website technology and related trade intangibles, marketing intangibles (such as trademarks and domain names), and European customer intangibles (such as customer lists and history data) — to the Luxembourg affiliate, which agreed to make a buy-in payment of $254.5 million over seven years and thereafter acted as the principal company for Amazon's European business.[61] Contemporaneously with the transfers of pre-existing intangibles, Amazon and the Luxembourg affiliate entered into a cost-sharing agreement under which the Luxembourg company would bear a share of Amazon's R&D costs in exchange for rights to all further technological developments relevant to the European business.[62] On audit, the IRS proposed an arm's-length buy-in payment of $3.468 billion.[63] After a six-week trial, the Tax Court held that $779 million was the arm's-length amount.[64]

The boxcar numbers in the foregoing paragraphs point to the dramatically enhanced role of intangible property as a source of profits in the digitalizing economy. The persons who drafted the 1968 cost-sharing regulations surely did not foresee that cost-shared intangibles developed in the United States would generate billions, even trillions, of dollars in profit for foreign affiliates of U.S. companies, or that such profit, prior to enactment of the TCJA, would remain outside the U.S. tax base.

Congress, however, had some inkling of the potential for mischief and, in 1986, handed Treasury and the IRS a new weapon, explained below, for use in combating tax avoidance through the expatriation of intangible property. Treasury and the IRS, however, declined to use

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[59] *Offshore Profit Shifting and the U.S. Tax Code – Part 2: Hearing Before the S. Permanent Subcomm. on Investigations,* 113th Cong. 20-22 (2013) (statement of Stephen E. Shay, Professor, Harvard Law).

[60] *Amazon.com, Inc. v. Commissioner*, 148 T.C. 108, 108-09 (2017).

[61] *See id.* at 112, 121.

[62] *Id.* at 123.

[63] *Id.*

[64] *Amazon.com, Inc. v. Commissioner*, 936 F.3d 976, 983 (2019), *aff'g* 148 T.C. 108 (2017).

this weapon, compounding the error of treating cost sharing as an arm's-length method rather than a safe harbor. Foreign subsidiaries of U.S. MNEs accumulated vast, untaxed or lightly taxed profits through entirely legal means — as a direct result of, not in spite of, the U.S. government's cost-sharing policies.

C.

The Tax Reform Act of 1986 effected many changes to the Internal Revenue Code, including the addition of a second sentence to section 482. That sentence provides: "In the case of any transfer (or license) of intangible property . . . the income with respect to such transfer or license shall be commensurate with the income attributable to the intangible."[65]

The commensurate with income concept, or "CWI," reflected the concern of Congress with the frequent absence of an objective basis for determining what constituted an "arm's-length result" in transactions between related parties involving intangible property. Ideally, for any related party transaction it would be possible to find one or more comparable transactions undertaken by unrelated parties in comparable circumstances, the pricing for which would define the arm's-length result, or suggest a range of arm's-length results, that should apply to the related party transaction. In reality, such genuinely comparable, uncontrolled transactions are rather the exception than the rule, especially for "transfers of high-profit potential intangibles":

> Taxpayers may transfer such intangibles to foreign related corporations . . . at an early stage, for a relatively low royalty, and take the position that it was not possible at the time of the transfers to predict the subsequent success of the product. Even in the case of a proven high-profit intangible, taxpayers frequently take the position that intercompany royalty rates may appropriately be set on the basis of industry norms for much less profitable items.
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> . . .
>
> In many cases firms that develop high profit-potential intangibles tend to retain their rights or transfer them to related parties in which they retain an equity interest in order to maximize profits. . . . Industry norms for transfers to unrelated parties of less profitable intangibles frequently are not realistic comparables in these cases.

[65] Tax Reform Act of 1986, P. L. No. 99-514, sec. 1231(e)(1), 100 Stat. at 2562.

> There are extreme difficulties in determining whether the arm's-length transfers between unrelated parties are comparable. The committee thus concludes that it is appropriate to require that the payment made on a transfer of intangibles to a related foreign corporation . . . be commensurate with the income attributable to the intangible.[66]

CWI authorized an ex-post evaluation of whether the agreed transfer price (in the form of a royalty stream or a lump-sum payment) for intangible property was reasonable in light of the income subsequently generated by the property in the hands of the transferee. If, for example, the transferee's income stream outperformed the projections used in determining the royalty or lump-sum amount, a "super-royalty" could be imposed. CWI did not necessarily reflect a distrust or rejection of the arm's-length standard but instead an acknowledgment that MNEs engage in certain types of transactions that do not occur under comparable circumstances between uncontrolled parties. There can be no observable "arm's-length" result for a transaction that arm's-length parties would not undertake.

The conference report that accompanied the 1986 legislation makes clear that Congress intended CWI to apply in the cost-sharing context:

> In order for cost-sharing arrangements to produce results consistent with the changes made by the Act to royalty arrangements, it is envisioned that the allocation of R&D cost-sharing arrangements generally should be proportionate to profit as determined before deduction for research and development. In addition, to the extent, if any, that one party is actually contributing funds toward research and development at a significantly earlier point in time than the other, or is otherwise effectively putting its funds at risk to a greater extent than the other, it would be expected that an appropriate return would be required to such party to reflect its investment.[67]

In short, Congress believed the allocable shares of R&D costs of cost-sharing participants should reflect actual profits rather than anticipated profits, and that buy-in payments should be commensurate with the value of pre-existing intangibles.

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[66] H.R. Rept. No. 99-426, at 423-426 (1985).

[67] H.R. Rept. No. 99-841 (Vol. II), at II-637 through II-638 (1986) (Conf. Rep.).

The conference report encouraged Treasury and the IRS to undertake a comprehensive study of the regulations under section 482.[68] The report of the resulting study, known as the "White Paper," was released in 1988.[69] The White Paper concluded that Congress intended for CWI to operate consistently with the arm's-length standard.[70] Making "periodic adjustments" to the transfer price for intangibles "to reflect substantial changes in intangible income as well as changes in the economic activities performed and economic costs and risks borne by the related parties in exploiting the intangibles" was "consistent with what unrelated parties would do."[71] Thus, CWI would merely overlay the historic practice of identifying and relying on comparable uncontrolled transactions. For most intangibles, "the appropriate income allocation under both the existing regulations and the commensurate with income standard w[ould] be the same," and even for high-profit intangibles, "[i]n the rare instance in which there is a true comparable . . . the royalty rate must be set on the basis of the comparable because that remains the best measure of how third parties would allocate intangible income."[72] Moreover, if a taxpayer could demonstrate that subsequent profitability was truly unanticipated, and that unrelated parties would not have agreed to allow for later pricing adjustments based on actual profitability, CWI should not be applied.[73]

The White Paper refrained from seizing the full scope of authority granted by CWI, both generally and in specific regard to cost sharing. Seemingly envisioning a precise, scientific segmentation of the income stream from cost-shared intangibles, the White Paper provided that the "super-royalty" provision would apply only in respect of income from intangibles in existence prior to the cost sharing arrangement:

> Fully developed intangibles command a royalty to the extent used by other participants and are generally not appropriately incorporated into a cost sharing arrangement. Thus, royalties for preexisting developed intangibles may not be included in the buy-in payment, but instead are subject to the general rules of the commensurate with income standard. Because a subsequent substantial deviation in the income stream from the intangible might require an adjustment,

[68] *Id.* at II-637.

[69] I.R.S. Notice 88-123, 1988-2 C.B. 458 (1988).

[70] *See Id.* at 472-74

[71] *Id.* at 472.

[72] *Id.* at 473

[73] *See id.* at 477-80.

> it is important to identify separately the income stream and royalties related to preexisting developed intangibles. In many situations, research is performed with respect to preexisting intangibles in order to improve the preexisting intangibles (improved software, for example) or to develop the next generation of intangibles. The requirement for an adjustment to the royalty paid for the intangible would not apply if the intangible is enhanced in value solely as a result of research undertaken after inception of the cost-sharing arrangement.[74]

In the wake of the White Paper, some commentators (and likely, taxpayers) viewed the *bona fide* cost-sharing arrangements provided for in the still-valid 1968 regulations as effectively beyond the reach of CWI. As one commentator observed in 1989, "[i]n the realm of the super-royalty provisions, cost-sharing remains an impressive exception."[75]

Yet, the White Paper promised forthcoming regulations that would significantly restrict cost-sharing arrangements by imposing relatively stringent requirements. Much as occurred after release of the 1966 proposed regulations, commentators criticized a perceived "unwillingness to provide the necessary flexibility to make the cost-sharing rules work in an international business environment."[76] According to the American Bar Association, "cost sharing should be viewed as a 'right' not as a 'privilege'" and "should be encouraged rather than discouraged."[77]

In 1992 proposed regulations, Treasury and the IRS largely rejected this criticism, providing detailed requirements for a "qualified cost-sharing arrangement," or QCSA, that were analogous to those that appeared in the original, 1966 proposed regulations. In particular, the newly proposed regulations expressly addressed buy-in payments for pre-existing intangibles.[78] Although taxpayers apparently retained the ability to adopt any reasonable method for sharing costs, certain provisions of the proposed regulations hinted at the potential use of CWI:

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[74] *Id.* at 497.

[75] Sheila J. Peterson, *A Looking Glass Tour Through a Cost Sharing Arrangement*, 5 SANTA CLARA HIGH TECH. L. J. 131, 160-161 (1989).

[76] ABA Comment Letter on White Paper, July 11, 1989, section G.1.

[77] *Id.*

[78] *Intercompany Transfer Pricing and Cost Sharing Regulations under Section 482*, 57 Fed. Reg. 3571, 3599-3600 (Jan. 30, 1992).

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> The district director may make allocations with respect to a qualified cost sharing arrangement to ensure that the method used for sharing costs is an appropriate measure of the benefits reasonably anticipated by each eligible participant. Such allocations may be required when the method chosen fails to accurately reflect the reasonably anticipated benefits over time . . . . [A]n allocation may be made by reference to a comparison of the participant's cost/income ratio and the cost/income ratio of the other eligible participants.[79]

The proposed regulations created a mechanical test to determine whether a QCSA's method for sharing costs was appropriate in light of the "reasonably anticipated benefits" for participants. The tool that the IRS would use to make this determination was the cost/income ratio. The regulations afforded the IRS the ability to make an allocation if a cost-sharing arrangement resulted in a cost/income ratio for one participant that was disproportionate to ratios of other participants. In such a case, the IRS could find a transfer of intangibles beyond that contemplated by the arrangement, and the participant would be required to make a "buy-in" payment.[80]

Commentators pushed back on the introduction of the cost/income ratio, arguing that "application of a mechanical income test . . . [was] improper because the results of [any QCSA are] highly speculative."[81] Commentators further argued that "a new participant's commitment to shoulder part of [the costs of a QCSA] should be viewed as sufficient consideration in and of itself,"[82] and that the potential for additional consideration in the form of a buy-in payment would deter participation in cost-sharing arrangements, for which Congress had expressed support. Numerous commentators insisted that research funded through QCSAs more frequently ended unsuccessfully than in a windfall for the participants, and that "[a] retroactive adjustment [in cases of a windfall outcome] is not what would occur in arm's-length arrangements."[83] Comments urged the IRS to either abandon the mechanical approach of the proposed regulations or to provide a safe harbor under which "the existence of a comparable

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[79] *Id.* at 3597.

[80] *Id.*

[81] TEI Comment Letter on 1992 proposed regulations, July 28, 1992, section XX.

[82] PriceWaterhouse Comment Letter on 1992 proposed regulations, June 19, 1992, section XI. K.

[83] PriceWaterhouse Comment Letter on 1992 proposed regulations, June 19, 1992, section XI. A; *See* Pharmaceuticals Manufacturers Association Comment Letter on 1992 proposed regulation, July 24, 1991, section 5; New York State Bar Association Comment Letter on 1992 proposed regulations, October 22, 1992, page 81 – 85.

cost-sharing agreement with a non-controlled party" would establish that a related party agreement was at arm's length.[84]

In 1995, Treasury and the IRS released final cost-sharing regulations. Perhaps in response to commentators' criticism, these final regulations diluted the potency of the proposed regulations' CWI provisions. The cost/income ratio test was eliminated in favor of a facts-and-circumstances rule allowing for post hoc allocations if "the taxpayer did not use the most reliable estimate of benefits" in determining participants' cost-sharing percentages.[85] Buy-in payments survived but were limited to situations in which "the economic substance of the arrangement [was] inconsistent with the terms of the arrangement over a period of years."[86]

The 1995 final regulations reflected two distinct but related policy failures. They continued to frame cost sharing as an arm's-length method rather than a regulatory safe harbor whose conditions could be established by tax authorities irrespective of whether they met an arm's-length test; and they largely abjured the authority granted by Congress through CWI. These flawed regulations remained in place for a decade in which the U.S. technology industry flowered, and valuable intangibles flowed offshore:

- Amazon, founded in 1994, adopted cost sharing as early as 1995, before its Seattle-based developers created Amazon Prime, Amazon Pantry, and the many other services without which today's urban consumers could not survive. As a result of cost sharing, Amazon's foreign profits from these innovations landed in low-tax offshore jurisdictions rather than the United States.
- Google, founded in 1998, transferred foreign rights to its U.S.-developed search technology and began cost sharing with a subsidiary located in no-tax Bermuda in 2003, the year before its initial public offering.[87]
- Apple, an old hand at cost sharing, began its fabled renaissance in the late 1990s with the return of Steve Jobs. When the research teams in Cupertino produced the iPod, iPad, and iPhone, Apple's Irish subsidiary — taxable nowhere — immediately owned the non-U.S. rights to those inventions as a result of having paid a portion of the development costs.

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[84] PriceWaterhouse Comment Letter on 1992 proposed regulations, June 19, 1992, section XI. C.

[85] *Section 482 Cost Sharing Regulation, 60 Fed. Reg. 65553*, 65559 – 60.

[86] *Id.* at 65564.

[87] Tim Worstall, *Google's Tax Investigation*, FORBES (Oct. 4, 2011), available at https://www.forbes.com/sites/timworstall/2011/10/14/googles-tax-investigation/#22b17e4b636f.

All of these outcomes were, to the authors' knowledge, accomplished in full compliance with the cost-sharing regulations and other applicable tax laws as they then stood.

The cost-sharing rules underwent a radical transformation after 2005. Proposed regulations issued that year started from the premise that third-party arrangements "asserted to be similar to" QCSAs were not so similar.[88] Thus, QCSAs could not be evaluated under the normal analytical framework of section 482, based on comparability with uncontrolled transactions. Rather than ask what unrelated parties *in fact did*, the IRS would hypothesize what unrelated taxpayers *would have done*.[89] Under this approach, a cost-sharing participant that contributed any externally created or acquired "resource or capability that is reasonably anticipated to contribute to developing cost shared intangibles" should be compensated by other participants in an amount equal to, conceptually, its opportunity cost.[90] The proposed regulations also prescribed new pricing methods drawn from financial literature, including discounted cash-flow methods.[91]

The current regulations, which generally took effect on December 22, 2011, incorporate these concepts.[92] Although they fail to reframe cost sharing as a safe harbor, they do reject the simplistic, comparables-based notion of what it means for an arrangement to be "arm's length." This regulatory sea change, however, came late. By 2011, the damage had been done.

III.

Nature abhors a vacuum. That is, in short, the lesson of the United States' pre-2011 experience with cost sharing. The United States forwent its residence-basis taxing rights over business profits attributable to the exploitation of "crown jewel" intangibles that in most cases were developed in the United States and that, but for the cost sharing rules, would have yielded taxable profits there.

Recall the counterfactual presented above: Absent the special regulatory regime for cost-sharing, arrangements would be evaluated under regulations generally applicable to transfers

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[88] Prop. Treas. Reg. § 1.482-7, 70 Fed. Reg. 51,116, 51,117 (Aug. 29, 2005).

[89] *Id.*

[90] *Id.* at 51,117, 51,135.

[91] *See id.* at 51,126-27.

[92] *See* Treas. Reg. § 1.482-7(c)(1), (g)(4) (2011).

of intangible property. Those regulations ordinarily require the payment of a market price dependent on *value*, not cost. For the U.S. taxpayer that develops intangibles in the United States and allows its foreign subsidiaries to exploit them overseas, there is an enormous difference between its U.S. federal income tax liabilities in the two scenarios.

Of course, revenue collection has never been the sole policy driver of U.S. international tax rules. Under the United States' pre-TCJA "deferral" system, U.S. companies could not easily access cash held in their foreign subsidiaries to fund U.S. research and development activity without paying at least one level of tax on the repatriation. Regulatory recognition of cost sharing provided a workaround. U.S. companies could channel foreign cash to fund U.S. development efforts without penalty, while at the same time taking into account the full amount of their costs, including the portion reimbursed through cost sharing, for purposes of the research and development tax credit. Correlation should not be confused with causation, but many U.S. companies known to have implemented cost sharing in the 1980s and 1990s are also global leaders in their industries and significant U.S. employers. Cost sharing may thus have contributed to policy aims other than revenue collection.

But as suggested above, the cost sharing regulations' relaxation of the normal rules seems to have gone too far. The early regulations failed to impose an express buy-in requirement for contributions of preexisting intangibles, allowing some high-value U.S.-developed intangibles to be shipped offshore free of any tax. The regulations' presentation of cost sharing as an arm's-length method rather than a safe harbor made cost sharing a right, not a privilege, and largely precluded the IRS from establishing appropriate guardrails. And during a 25-year period in which U.S. pharmaceutical, technology, and other intangibles-driven industries flourished, the regulations abjured the commensurate-with-income power in the cost-sharing context.

Combined, these policy choices embedded in the cost sharing regulations amounted to a ceding of U.S. residence-basis taxing jurisdiction. The staggering untaxed and lightly taxed sums sloshing through the system ultimately became too large and too public for other jurisdictions to ignore. So these other jurisdictions stepped into the void. If the United States, as residence jurisdiction, would not tax those profits, they would.

The 2013 OECD report that precipitated the BEPS Project illustrates the dramatic extent to which international tax policymaking has evolved in the past decade and the role of cost sharing in that evolution.[93] The report's then-novel observations on, for example, the globalization of supply chains and the decreasing relevance of physical presence, now seem

[93] *See* OECD (2013), *Addressing Base Erosion and Profit Shifting*, OECD Publishing.

almost quaint.[94] The thrust of the report is that MNEs "exploit differences in domestic tax rules and international standards that provide opportunities to eliminate or significantly reduce taxation," that such exploitation, though generally lawful, undesirably reduced government revenues, and that governments should take immediate action to eliminate asymmetries that gave rise to double tax benefits and/or double nontaxation. Among the six "key pressure areas" identified in the report is "[t]ransfer pricing, in particular in relation to the shifting of risks and intangibles, the artificial splitting of ownership of assets between legal entities within a group, and transactions between such entities that would rarely take place between independents."[95]

Hammering home the point, the report presents a handful of examples of tax planning strategies motivating its recommended action plan. These include a "transfer of manufacturing operations together with a transfer of supporting intangibles," and an "e-commerce structure using a two-tiered structure and transfer of intangibles," in each case under a cost-sharing arrangement.[96] In each example, the parent company organized in Country A develops technology or other intangible property and, pursuant to a cost sharing arrangement, transfers those intangibles to a different-country subsidiary. Various forms of tax arbitrage or nontaxation ensue. Also in each example, references to a "check-the-box election"—an election available only under U.S. tax law, whereby a taxpayer can effectively make its foreign subsidiary disappear for U.S. income tax purposes—reveal Country A as the United States. The examples assume buy-in payments to have been made, but they present the cost-sharing arrangements as drivers of inappropriate tax results.

When the BEPS Action Plan emerged, cost sharing garnered only a minor reference: Action 8, addressing transfer pricing aspects of intangibles transfers, would (among other things) produce updated guidance on "cost contribution arrangements," the OECD analog to cost sharing arrangements.[97] Work performed under Action 9, which focused on the allocation of and returns to risk within multinational groups, would also prove relevant to cost sharing arrangements.

A final report issued in 2015 revised prior OECD transfer pricing guidance regarding cost contribution arrangements, or CCAs. Among other changes, the report prescribes rules to

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[94] *See id.* at 26-28.

[95] *Id.* at 6.

[96] *See id.* at 74-79.

[97] OECD (2013), *Action Plan on Base Erosion and Profit Shifting*, OECD Publishing, at 20.

ensure that a cost sharing participant must be more than a shell company infused with cash: a participant must "exercise[] control over the specific risks it assumes under the CCA and ha[ve] the financial capacity to assume those risks."[98] The report further cautions that participants' contributions, "with specific focus on intangibles, should not be measured at cost when this is unlikely to provide a reliable basis for determining" their relative value.[99]

Beyond these outcomes specifically related to cost sharing, BEPS produced recommendations and minimum standards on a host of other topics, including hybrid mismatch arrangements (in which two or more jurisdictions characterize an entity or item of income or expense in asymmetric ways), countering harmful tax practices (such as tax preferences not linked to substantive activities within a jurisdiction), and the prevention of treaty abuse (such as "shopping" among jurisdictions for a subsidiary solely on the basis of favorable bilateral income tax treaty provisions). Although ostensibly independent of cost sharing, the discontinuities giving rise to these changes were far from new and likely would never have invited such a response had the United States' historic cost sharing policies not put so much intangibles income in play.

The same can be said of the "state aid" cases. The European Commission's investigation and decision against Apple make the point most effectively: the Commission cut a new and dubious version of the arm's length standard from whole cloth in order to situate taxing rights over vast amounts of income generated by U.S.-developed intangibles in Ireland, which sat on the other side of Apple's cost-sharing arrangement.[100] In reversing the European General Court, the CJEU emphasized that Apple must reap what it had sown. According to the court, because of Apple's cost-sharing agreement, it could not take into account the activities of Apple employees in Cupertino in creating the vast quantities of intangibles profit that the agreement routed to AOE and ASI; instead, that profit could be allocated only between those companies' no-substance head offices or their Irish branches.[101]

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[98] OECD (2015), *Aligning Transfer Pricing Outcomes with Value Creation*, Actions 8-10 – 2015 Final Reports, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, at 162.

[99] *Id.*

[100] *See* Ruth Mason, *Ding-Dong! The EU Arm's Length Standard is Dead*, 108 Tax Notes Int'l 1249 (Dec. 5, 2022); Commission Decision 17/1283, 2017 O.J. (L 187) 1 (EC); *see also* Commission Decision 17/1283, 2017 O.J. (L 187) 1, ¶ 43 (EC) ("As of 26 September 2015, Apple held USD 186,9 billion in cash, cash equivalents and marketable securities through foreign subsidiaries. This amount corresponds substantially to foreign profits which were not subject to taxation.").

[101] C-465/20 P, *European Commission v. Ireland* ¶¶ 285-286 (Sept. 10, 2024) ("Thus, the need to take into account . . . the allocation of assets, functions and risks between the Irish branches and the other parts of ASI and AOE,

To be sure, cost sharing did not alone produce the nontaxation outcome that so obviously roused the Commission's ire and leant a note of schadenfreude to the CJEU's decision. In the case of Apple, it was not only the company's early adoption of cost sharing, before the explicit requirement for buy-in payments, but also its insight that arbitrage of the United States' and Ireland's corporate tax residency rules could allow the creation of a foreign subsidiary that was tax-resident nowhere. These factors plus the Irish government's arguable complicity combined to shield nearly $200 billion in profits from taxation.

At bottom, however, the U.S. decision to cede residence-basis taxing authority over profits from intangibles developed in the United States was a significant driver of these state aid cases. The Commission almost surely would not have sought to correct plainly undesirable tax policy outcomes by asserting that European jurisdictions' transfer pricing rulings conferred unlawful state aid if the United States had fully asserted its taxing jurisdiction over the U.S. participants in the cost sharing arrangements. Had Apple's resident-nowhere subsidiaries been required to pay royalties to the U.S. parent that were commensurate with the profit they generated from non-U.S. sales of Apple products, those subsidiaries would never have accumulated such towering piles of untaxed profit. The Commission tried to subject to tax what the United States had left on the table.

The unintended consequences of leaving so much taxable profit on the table may have reached their zenith in the post-BEPS project that evolved into Pillars One and Two. By the time the project picked up steam in or around 2018, the profit was no longer on the table. As part of the TCJA, the United States had by then subjected all of its multinationals' historic, untaxed foreign profits to a one-time tax at a modest rate. But the TCJA failed to turn the tide.

A policy note delivered in 2019 identifies "the continued shifting of profits to entities subject to no or very low taxation" as factors motivating Pillar Two's global minimum tax.[102] The tax, now being implemented across the globe (albeit not in the United States), backstops governmental behavior as well as that of taxpayers: it "strengthen[s] the ability of jurisdictions to tax profits where the other jurisdiction with taxing rights applies a low effective rate of tax to those profits," and guards against "un-coordinated unilateral action, both to attract more tax base

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without regard to any role that may have been played by Apple Inc., arises solely from the Apple Group's decision to transfer the costs and risks related to that group's IP under the cost-sharing agreement.")

[102] OECD (2019), *Addressing the Tax Challenges of the Digitalisation of the Economy – Policy Note*, OECD/G20 Base Erosion and Profit Shifting Project, at 1-2.

and to protect the existing tax base, with adverse consequences for all countries."[103] All profits from cross-border activity are intended to be taxed at a minimum rate of 15%, if not by the source or residence country then by one or more third countries that have adopted the Pillar Two rules.[104] Pillar Two would prevent not only taxpayer mischief but also government laxity of the kind embodied in the United States' historic cost-sharing policies.

Pillar One, though currently moribund, is an even more cautionary tale. Within Pillar One, the simple concept underpinning the BEPS project – that profit should be taxed where value is created – has given way to the fuzzier "sustainable taxation framework reflective of today's digitalizing economy, with the potential to achieve a fairer and more efficient allocation of taxing rights."[105] Although Pillar One ostensibly solves for tax challenges of the digitalizing economy, its "fairer and more efficient allocation of taxing rights" signals the abrupt end of the longstanding source-residence duopoly.

Pillar One would create a new taxing right over certain profits of highly profitable, primarily U.S.-parented, multinationals, and vest that taxing right in market countries from which the multinationals earn, or are deemed to earn, meaningful revenue. A highly complex scheme of rules would determine which market countries would benefit and to what extent, and which source and residence countries would surrender primary taxing rights, so as to avoid (at least in theory) double or multiple taxation of the same income. Companies subject to the new tax rules would file a global information return. New administrative and dispute resolution apparatuses would be constructed.

How did we end up *here*? A history of Pillar One could have many chapters, but an early one would focus on cost sharing. To continue to pick on Apple—which, to be clear, the authors believe to have operated consistently with applicable U.S. income tax laws: If one views cost sharing as reflective of arm's-length outcomes, as the U.S. regulations long have done, one must accept the idea that much of the value inherent in an iPhone was created by a letterbox in Cork rather than by engineers and designers in Cupertino. With that predicate, the notion that taxable value is also created by iPhone users in Cannes or Kolkata is not so much of a stretch. At the global level, taxation is a multiplayer game. If neither the United States nor Ireland would tax Apple's $186.9 billion of profit, other countries would. Nature abhors a vacuum.

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[103] *Id.* at 2.

[104] OECD (2021), *Statement on a Two-Pillar Solution to Address the Tax Challenges of the Digitalisation of the Economy*, OECD/G20 Base Erosion and Profit Shifting Project, at 3-4.

[105] OECD (2020), *Cover Statement by the Inclusive Framework on the Reports on the Blueprints of Pillar One and Pillar Two*, OECD/G20 Inclusive Framework on BEPS, ¶ 5.

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IV.

We have described above how the United States' misguided cost sharing policy both sacrificed billions of dollars of tax revenue and destabilized a longstanding international tax consensus.

The first of these outcomes – a tremendous revenue loss for the Treasury – may well be beyond remedy. If, however, the United States was of a mind to address the continuing insult to its tax base attributable to flawed cost sharing policies, there are measures that might be considered.

One would be to expand the longstanding controlled foreign corporation regime of subpart F to cover the income of foreign cost-sharing participants from the exploitation of cost-shared intangibles. This would result in a current tax to the U.S. parent corporation at the full corporate tax rate of 21% rather than the reduced rate applicable to GILTI. Subpart F inclusions take precedence over GILTI.

Raising the rate of tax on intangibles income of foreign cost-sharing participants would not necessarily produce greater U.S. tax revenue, since creditable income taxes of source jurisdictions (and potentially market jurisdictions, should Pillar One come to fruition) would have primacy of place and by reason of the foreign tax credit could substantially offset or eliminate the U.S. tax on expanded subpart F income. At the higher U.S. rate, however, foreign taxes would be less likely to result in zero U.S. residual tax.

Companies affected by an expansion of subpart F would doubtless complain of being rendered noncompetitive in foreign markets. It is hard to believe, however, that a zero or near-zero U.S. tax rate is needed for competitiveness and, in any event, the companies would have an attractive alternative. They could repatriate cost-shared intangibles to the United States, as some have already done, and the U.S. parent could arrange for foreign profits to qualify as foreign derived intangible income, another TCJA creation, taxable at a rate of 13.125%.

Another approach might be to invoke CWI with respect to intangibles that were contributed to a cost-sharing arrangement without a buy-in after 1986, when CWI came into force. The normal statute of limitations, usually three years but sometimes six, after a tax return has been filed would preclude an IRS assertion that a buy-in was required from the outset of the arrangement. It is not, however, far-fetched to read CWI as covering the ongoing exploitation of contributed intangibles for which foreign cost-sharing participants did not pay an arm's length price. Other commentators have proposed a range of theories upon which the IRS'

enforcement function could pursue foreign profits from cost-shared intangibles in the case of specific U.S. taxpayers.[106] Some of these theories potentially have wider application.

Whether or not the United States attempts to reverse the effects on the federal income tax base of its historic policymaking failures in the context of cost sharing, the second adverse outcome of those failures – destabilization of the longstanding international tax consensus – is beyond redress. As we have observed above, the United States' emphatic reassertion of residence basis taxing jurisdiction in the TCJA occurred too late to stop the disruption. The sands of international taxation continue to shift, but the general trends are clear. The source-residence duopoly born in the 1920s is broken. Residence jurisdictions' taxing rights have been curtailed. And U.S. companies will henceforth be taxed more heavily, in more locations, on more of their profits. The United States' cost-sharing policies may not be solely responsible for these changes, but as we have demonstrated here, they are a root cause – the original sin.

The lesson for would-be U.S. policymakers in this election year is a simple one: Do not sit on your taxing rights; if you don't tax it, someone else will.

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[106] *See* Stephen L. Curtis and Reuven Avi-Yonah, *Microsoft's Cost-Sharing Arrangement: Frankenstein Strikes Again*, 109 Tax Notes Int'l 1237 (Mar. 6, 2023); Stephen L. Curtis, *eBay's Cost-Sharing Arrangement — Frankenstein's Progeny*, 175 Tax Notes Federal 1655 (June 13, 2022); Stephen L. Curtis, *Google's Cost-Sharing Arrangement: Bride of Frankenstein*, 173 Tax Notes Federal 1623 (Dec. 20, 2021); Stephen L. Curtis and David G. Chamberlain, *Apple's Cost-Sharing Arrangement: Frankenstein's Monster*, Part 2, 172 Tax Notes Federal 1217 (Aug. 23, 2021); Stephen L. Curtis and David G. Chamberlain, *Apple's Cost-Sharing Arrangement: Frankenstein's Monster*, 172 Tax Notes Federal 1049 (Aug. 16, 2021).