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The Tax of Physics, the Physics of Tax

Stephen B. Cohen
Georgetown University Law Center, cohen@law.georgetown.edu

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3 Green Bag 2d 375-379 (2000)
THE TAX OF PHYSICS, THE PHYSICS OF TAX

Stephen Cohen

Sometimes ideas from science illuminate muddled legal thinking. Physics teaches that, for every particle of matter, there exists a corresponding particle of anti-matter. A particle of matter and its corresponding particle of anti-matter are identical except that they have opposite electrical charges. A proton’s charge is positive, an anti-proton’s negative. When matter and anti-matter meet, they produce the most powerful explosion in nature, totally annihilating each other.

These ideas help explain the Sixth Circuit Court of Appeals decision in Bradford v. Commissioner. Bradford involved a baffling departure from established rules for taxing the discharge of a debt. The facts were as follows.

Mrs. Bradford, the taxpayer named in the case title, and her husband, Mr. Bradford, resided in Nashville, Tennessee. Mr. Bradford was a partner in a securities firm with a seat on the New York Stock Exchange (NYSE). In 1938, the NYSE decided to require every partner of a member firm to disclose his debts. At the time, Mr. Bradford owed a Nashville bank $300,000.

1 Professor of Law, Georgetown Law Center.
3 233 F.2d 935 (6th Cir. 1956).

I am deeply indebted to Prof. Marvin Chirelstein, who raised my consciousness about Bradford in his basic income tax course at the Yale Law School in the spring of 1970.

The actual numbers of this case, as well as of other cases cited in this essay, have been modified to simply the presentation.
He had borrowed the money in early 1929 and invested the funds in a number of banking ventures. Although the opinion does not reveal the fate of these ventures, the timing--he invested just months before the 1929 stock market crash--makes it probable that he incurred substantial losses.

Mr. Bradford feared that disclosure of a debt as large as $300,000 might disqualify his firm from NYSE membership. He therefore obtained the bank’s consent to substitute his wife as the debtor for $200,000 of his $300,000 total debt. Mrs. Bradford gave the bank her promissory note for $200,000. The bank thereupon reduced Mr. Bradford’s debt from $300,000 to $100,000. Mr. Bradford then filed a report with the NYSE disclosing debts of only $100,000.

Two years later in 1940, at the bank’s request, his wife replaced her original $200,000 note with two separate $100,000 notes. One of the $100,000 notes was collateralized. The other $100,000 note was unsecured. This $100,000 unsecured note was the subject of the Bradford decision.

In 1946, eight years after Mrs. Bradford had originally assumed her husband’s debt, a bank examiner concluded that the full $100,000 amount of her unsecured note was uncollectible. He recommended that the bank take less than full payment in order to wipe the loan from its books. Accepting the examiner’s advice, the bank offered to discharge the $100,000 unsecured note for a payment of only $60,000.

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Although not an issue in the case, Mr. Bradford may have committed fraud in 1938 when he arranged for his wife to assume $200,000 of his bank debt and failed to disclose this fact to the NYSE when reporting his debts. The NYSE may also have been at fault for not requiring the disclosure of debts owed by either the partner of a member firm or the partner’s spouse.
While the Bradfords found the bank’s offer attractive, they were concerned about the federal income tax consequences. A debtor who pays off a note for less than the full amount owed generally has taxable income. The debtor receives an economic benefit, relief from the full amount of a liability, which exceeds the amount paid for the benefit. The Internal Revenue Code taxes the excess as income. The Bradfords feared that, if Mrs. Bradford straightforwardly paid off the $100,000 note for only $60,000, she would have to report the $40,000 difference as taxable income.

To avoid having to report taxable income from paying off the debt for less than the full amount owed, the Bradfords concocted a scheme worthy of Jay Gould. Mr. Bradford had a half-brother, a Mr. Duvall. Instead of paying the bank $60,000, the Bradfords paid Mr. Duvall $60,000. Mr. Duvall then used the $60,000 to buy Mrs. Bradford’s $100,000 unsecured note from the bank.

If Mr. Duvall had acted independently, his purchase of the note would not have produced taxable income for Mrs. Bradford. The note would have remained outstanding, and Mrs. Bradford would still have been obligated to pay the full amount of the debt to the third party purchaser. Under the tax law, the purchase of a note at a discount by an independent third party has no tax consequences for the debtor.


Gould, a nineteenth century railroad financier, was famous for his deceptive business practices. In 1869, Gould engineered control of the gold market, leading to a financial panic in which thousands of investors suffered losses while Gould made a fortune. By 1890 his railroad holding included about 13,000 miles of track. See MAURY KLEIN, THE LIFE AND LEGEND OF JAY GOULD (1986).
The court determined, however, that Mr. Duvall acquired the note as an agent for the Bradfords rather than for himself. The Bradfords supplied the money that Mr. Duvall used to make the purchase. Moreover, Mr. Duvall, once in possession of the note, never intended to collect the debt from Mrs. Bradford. Mr. Duvall was, as tax lawyers say, “a mere conduit.” In reality, the court decided, Mrs. Bradford had paid off her $100,000 unsecured note for only $60,000.

The court nevertheless held that Mrs. Bradford did not have to report income when she paid off her $100,000 debt for only $60,000 in 1946. The court admitted that the 1946 discharge of her debt produced a $40,000 gain. However, the court reasoned, in 1938 Mrs. Bradford had assumed a $200,000 liability, which reduced her net worth by that amount and constituted a $200,000 loss. Therefore, the court concluded, Mrs. Bradford should be permitted to deduct this earlier 1938 loss against her later 1946 discharge of debt gain.

The court conceded that permitting a loss from one year to offset a gain from a different year violated the principle of annual accounting. “It is a well settled general rule,” the court recognized, “that each year’s transactions are to be considered separately, without regard to what the net effect of a particular transaction might be if viewed over a period of several years.” Nevertheless, the court permitted an exception to the annual accounting principle. It cited the Supreme Court’s 1926 decision in Bowers v. Kerbaugh-Empire as authority for an exception when income arises from the discharge of a debt for less than the full amount owed.

In Kerbaugh-Empire, the taxpayer had borrowed $700,000, invested the funds at a loss

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8 233 F.2d at 938.
9 271 U.S. 170 (1926)
between 1913 and 1918, and paid off the debt for $100,000 in 1921. The IRS argued that the taxpayer had a gain of $600,000 when it discharged its $700,000 debt for only $100,000. The Supreme Court held that the taxpayer did not have to report any gain since its 1913-18 investment losses exceeded its 1921 discharge of debt income.

However, five years later, in United States v. Kirby Lumber, the Supreme Court appeared to disavow Kerbaugh-Empire when it required the taxpayer to report income from discharging a debt for less than the full amount owed. Although the Supreme Court distinguished Kerbaugh-Empire by asserting that in Kirby Lumber there were no offsetting losses, it appears that such losses had in fact occurred. Tax lawyers therefore understood Kirby Lumber to mean that the Kerbaugh-Empire exception to the annual accounting principle might no longer be available.

Why did Kirby Lumber distinguish rather than overrule Kerbaugh-Empire? The Supreme Court decided Kerbaugh-Empire in 1926 and Kirby Lumber in 1931. The Court that decided Kirby Lumber may not have wanted to admit that it had erred only five years before. Moreover, the Supreme Court may have preferred not to reverse its earlier ruling in order to maintain the appearance of respect for the principle of stare decisis.

Twenty-five years later in 1956, the Bradford opinion emphasized that Kerbaugh-Empire had never been overruled. Therefore, the opinion observed, an exception to the annual accounting principle was “not without [supporting] authority,” and “a court need not . . . be

10 284 U.S. 1 (1931)


12 233 F.2d at 938.
oblivious to the net effect of the entire transaction.” The Bradford court did not affirmatively declare that there was supporting authority for this exception to the annual accounting principle or that a court needs to consider the entire transaction’s net effect. Perhaps the court used double negatives because it too was uncertain that Kerbaugh-Empire remained good law.

Resurrecting Kerbaugh-Empire was not the only or even the most serious feat of intellectual acrobatics that the Bradford court attempted. Even assuming that Kerbaugh-Empire was alive and well, the court had to find losses that Mrs. Bradford could offset against her 1946 discharge-of-debt gain. The most obvious set of losses were probably the losses suffered by Mr. Bradford when he invested the original loan in banking ventures just prior to the Great Depression.

However, the taxpayer who incurred these losses was Mr. Bradford, the husband, while the taxpayer who had the discharge of debt gain was Mrs. Bradford, the wife. Losses incurred by one individual cannot offset the gains of another individual, unless the taxpayers are a married couple filing jointly, who may combine their losses and gains. The Bradfords were married but Congress did not provide for joint filing until 1948. In 1946, there was only individual filing, which created an insuperable obstacle to the husband’s banking losses offsetting his wife’s discharge of debt gain.

Therefore, if the Sixth Circuit was to find losses that Mrs. Bradford could use to offset her 1946 discharge of debt gain, it would have to look somewhere else. In searching for a usable loss, the court committed a serious error. As noted above, the court found the loss in Mrs.

13 233 F.2d at 939.
Bradford’s assumption of the $200,000 liability in 1938. However, her assumption of the debt constituted a gift to her husband, and a gift is a nondeductible personal consumption expense. Donors may never deduct gifts, except for the special case of charitable donations.

Consider the following hypothetical transaction, which is identical in substance to what actually occurred in *Bradford*. Suppose that in 1938 Mrs. Bradford had borrowed $200,000 in cash from the Nashville bank and made a gift of the cash to her husband, who used it to pay off $200,000 of his bank debt. Her gift of $200,000 in cash would have been a nondeductible personal consumption expense. A nondeductible expense from 1938 could not have offset a discharge of debt gain from 1946 even if *Kerbaugh-Empire* still permitted an exception to the annual accounting principle.

Still, despite torturing the concept of a “deductible loss,” the Sixth Circuit was probably correct in concluding that Mrs. Bradford should not have to report any gain. Anti-matter helps provide a rational basis for this conclusion. The path is somewhat roundabout but requires no more than slight indulgence from the reader.

A donor can make a gift in one of two ways: either by assuming a debt or by transferring an asset. Mrs. Bradford assumed her husband’s $100,000 debt, which she later paid off for $60,000. Suppose instead that she bought an asset for $60,000 and made a gift of it to her husband, who later sold it for $100,000. Whether the gift consisted of assuming a debt or transferring an asset, the donee, the husband, would receive a benefit worth $100,000 at a cost of $60,000 to the donor, his wife. Thus, each gift would produce a $40,000 gain, equal to the

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14 *See* I.R.C. §§ 170(a), 262 (2000).
difference between the donee’s economic benefit and the donor’s cost.

Who should report this gain, the donor or the donee? In the case of a gift made by transferring an asset, the Internal Revenue Code is explicit: the donee reports the gain. In the case of a gift made by assuming a debt, the Code is silent.

However, an analogy with matter and anti-matter provides an answer. The relationship between an asset and a debt is like that of matter and anti-matter. For every asset, there is a corresponding debt or anti-asset. Like a proton and anti-proton, an asset and its corresponding anti-asset (that is, debt) are identical in every respect except that one is positive and the other is negative. Like matter and anti-matter, an asset and anti-asset combine to cancel each other out, that is, they annihilate each other.

Just as the laws of physics apply equally to matter and anti-matter, the laws of tax should apply equally to assets and anti-assets. The rule that the donee reports the gain should apply regardless of whether the donor transfers an asset or assumes an anti-asset.

Had the Bradford court been familiar with anti-matter, it might have decided that, when the $100,000 anti-asset was discharged for a payment of only $60,000, it was Mr. Bradford, the donee, rather than Mrs. Bradford, the donor, who had the $40,000 gain. The court then could

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have performed its sleight-of-hand resuscitation of *Kerbaugh-Empire* and observed that Mr. Bradford could offset his 1946 discharge of debt gain with his Depression era investment losses. The court might still have been taking some liberties with the Supreme Court’s tax jurisprudence. The idea of anti-matter, however, would have helped provide a sounder basis for the court’s decision.

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