

Note on Taxation of Original Issue Discount (OID)*

[*Adapted by the author from Michael J. McIntyre, The International Income Tax Rules of the United States, Lexis Publishing (2000, looseleaf).]

In general, original issue discount (OID) is the difference between the stated redemption price for a debt instrument at maturity and the price paid for the debt instrument at the time it was issued.¹ The redemption price is the price that the person issuing the instrument (the borrower) is obligated to pay when the instrument is mature – that is, when it becomes due and must be paid off. The OID on a bond or other debt instrument is sometimes referred to as the “premium.”

Example. A corporation borrows \$100 in year 1 and promises to repay \$150 in year 5. As evidence of its debt, it issues a debt instrument with a redemption price (sometimes called “face amount”) of \$150. The *original issue discount* with respect to the corporate debt instrument is \$50 (\$150 redemption price minus \$100 price when issued).

A debt instrument may have some stated interest and also some OID. The extreme case of an OID bond is a bond issued for less than the redemption price with no stated interest at all.

OID is a substitute for periodical interest payments. When an OID bond or other debt instrument is issued, the premium due at the end of the term of the bond — that is, the OID — must compensate the holder of the bond for lending the issue price of the bond and also for lending the interest that was accruing annually on the bond.

Example. A issues a bond, with a two-year term, for \$100 at a time when the annual market rate of interest is 6 percent. No stated interest is payable on the bond. To make the bond attractive to prospective holders, A must agree to compensate the holder of the bond, by way of a redemption premium, not only for the \$12 of interest due on the issue price but also for the delay in paying the \$6 of interest that would accrue in the first year. At a 6 percent annual rate, the charge for the year's delay in making the \$6 interest payment accruing in year 1 would be \$.36 (6% of \$6). Thus the redemption price of A's bond would have to be \$112.36 for it to be marketable.

During periods of high interest rates, the OID for a bond with an extended term would have to be very high relative to the issue price in order to be competitive in the marketplace with a bond paying periodical interest.

¹IRC § 1273(a) and (b).

Example. An OID bond paying no periodical interest is issued for \$100, redeemable after 25 years, at a time when the market interest rate is 15 percent. In the first year, the return on the OID bond would have to be 15 percent of the issue price, or \$15, in order to be competitive with a bond paying periodical interest of 15 percent. In the second year, the return would have to be \$17.30, which is 15 percent of the sum of the issue price of \$100 and the deferred interest of \$15. In the third year, the return would have to be \$19.84 (15% of (\$100 + \$15 + \$17.30)).

The deferred annual return in the example above would have to grow exponentially. In the 25th year, the deferred return on the issue price and the deferred interest would be \$429. The sum of the accrued interest due for all 25 periods plus the issue price would amount to \$3,292. That is, for an OID bond with an issue price of \$100 and redeemable in 25 years to be competitive in the marketplace with a bond paying periodical interest of 15 percent, its promised redemption price would need to be almost 33 times its issue price.²

An investor considering the purchase of an OID bond should calculate the implicit interest rate payable on that bond. That implicit rate is called the yield, or the yield to maturity. A present worth formula can be used to compute the yield to maturity.

For a bond having no stated interest, the yield to maturity, r , expressed as an annual interest rate, can be determined by solving the following equation:

$$I = R/(1 + r)^N$$

where I is the issue price, R is the redemption price, and N is the term of the bond, expressed in years. If the interest is to be compounded over some accrual period other than a year, then r would be the interest rate per accrual period and N would be the number of accrual periods over the term of the bond. A somewhat more complicated formula must be used to compute the yield to maturity for OID bonds that pay some periodical interest and also pay a premium at redemption.³

The United States has developed detailed rules for determining the tax consequences resulting from the issuance of debt instruments at a discount. A full discussion of those rules, contained in Code sections 1271 to 1288, is beyond the scope of this note. The OID rules provide a formula for allocating the original issue discount attributable to a bond (or other debt instrument) over the expected term of the bond.

²If the bond were redeemable after 30 years, the redemption price would have to be \$6,621 for the bond to be competitive with a \$100 bond paying periodical interest of 15%. See *General Explanation of the Revenue Provisions of the Tax Equity and Fiscal Responsibility Act of 1982* (1982) at 159.

³That formula would provide that the issue price would equal the sum of the present worth of the periodical interest payments due on the bond and the present worth of the redemption price.

The objective of the formula is to amortize original issue discount in a manner that approximates the manner in which interest would accrue on a bond that was issued for its face amount and pays a market interest rate.

The formula for allocating original issue discount to particular taxable periods is contained in Code section 1272(a)(3) and explained in further detail in the two dozen odd pages of proposed Treasury regulations under that section. The statutory formula provides a method for spreading the total OID attributable to a bond over the term of that bond. Some portion of the OID is allocated to each day of that term. The Code refers to the OID allocated to a particular day as the "daily portion" of the OID. The OID allocated to a particular taxable year is referred to as the accrued OID for that year. The accrued OID for any year would be the sum of the daily portions for that year. With some exceptions, a holder of an OID bond is taxable each year on the OID allocated to that year, unless the holder is a related foreign person.⁴ The issuer of an OID bond generally can deduct each year the accrued OID for that year.⁵

The daily portion of OID is determined by ratably spreading the OID allocated to an "accrual period" over the days in that period. An accrual period is a year or other period over which interest is being compounded. The term of a bond is divided into accrual periods, starting backwards from the redemption date. All of the accrual periods are of equal duration, except perhaps for the first accrual period. An OID bond paying some interest on an annual basis generally would have an accrual period of a year. For an OID bond paying no periodical interest, the accrual period would be 6 months.⁶

The OID allocable to the first accrual period is calculated by multiplying the issue price of the bond by the yield to maturity and subtracting the interest actually paid on the bond.

Example. A bond is issued for \$100. Its yield to maturity is 15 percent, its accrual period is one year, and the annual interest actually paid is \$8. Under these conditions, the OID allocable to the first year is \$7 (15% of \$100 minus \$8).⁷

The OID allocable to subsequent accrual periods is calculated in a similar manner, except that the yield to maturity is multiplied by the "adjusted issue price" of the bond.

⁴IRC § 1272(a)(1).

⁵Exceptions to the general rule apply for tax exempt obligations, for U.S. savings bonds, for bonds with a maturity date one year or less from the date of issuance, for obligations issued by a natural person before March 2, 1984, and for certain loans of less than \$10,000 between natural persons. IRC § 1272(a)(2).

⁶See Reg. § 1.1272-1(d).

⁷If the first accrual period is less than a year, the yield to maturity would be adjusted to reflect the yield on the bond for that shorter period.

The adjusted issue price is the sum of the issue price and the OID allocated to prior accrual periods. In the example above, the adjusted issue price for the bond in the second accrual period would be \$107 (\$100 + \$7). The OID allocated to the second period would be \$8.05 (15% of \$107 minus \$8). For the third accrual period, the adjusted issue price would be \$115.05 (\$100 + \$7 + \$8.05) and the OID allocated to that period would be \$9.23 (15% of \$115.05 minus \$8).

In the examples above, the OID bond was issued for cash. More complicated rules apply for bonds issued for property other than cash.⁸

In some cases, the taxpayer may sell an OID bond before its maturity date. In that event, it is taxable on the OID that has accrued up to the time of the sale. The buyer is responsible for paying tax on OID accruing after the sale.

⁸IRC § 1273(b).