

## Classroom Discussion of Net Operating Losses

Let's look at how IRC § 172 works. Assume a taxpayer has the following income, business deductions, taxable income and tax liability (timely paid) for the following years:

<i>Year</i>	<i>Income</i>	<i>Business deductions</i>	<i>Taxable income</i>	<i>Tax liability</i>
2014	\$ 100	\$ 60	\$ 40	\$ 10
2015	100	60	40	10
2016	100	60	40	10

Assume that in the year 2017, the taxpayer has income of \$20 and deductions of \$80, for a taxable loss of \$60. This loss is a net operating loss, or "NOL." The NOL is determined when the taxpayer fills out its 2017 return, which shows no tax owing.

Under section 172, the taxpayer is permitted to reopen the years 2015 and 2016. It is permitted to carry back the 2017 loss two years, to 2015, and recalculate its taxable income for 2015. Since the net operating loss carryback is in excess of the taxable income of \$40 for that year, the taxable income for 2015 is recomputed as \$0, and the IRS will send the taxpayer a refund of \$10 for 2015 shortly after the return for 2017 is filed.

For 2016, the same process applies. Since only \$40 of the net operating loss carryback from 2017 was "used up" (or "absorbed") by 2015, the taxpayer has another \$20 to carry to 2016, which reduces the taxpayer's 2016 taxable income to \$20, and creates a revised tax liability of only \$5. The taxpayer is entitled to have the other \$5 of tax paid for 2016 refunded, and the IRS will also send the taxpayer a refund of \$5 attributable to 2016 soon after the 2017 return is filed. At this point, the taxpayer has "used up" the entire 2017 net operating loss of \$60.

Now assume that in 2018, another loss is generated. The taxpayer has income of \$20, deductions of \$100, and thus a taxable loss of \$80. At this point, the taxpayer is entitled to carry back from 2018 to 2016. Recall that taxable income for 2016 has already been reduced to \$20 by the carryback from 2017. Now the remaining \$20 of 2016 taxable income is wiped out by the carryback of the 2018 NOL. The taxpayer is entitled to revise its taxable income for 2016 by applying the 2018 NOL against it. Since the 2018 NOL of \$80 is greater than the revised taxable income of \$20 for 2016, taxable income for 2016 is reduced to \$0 instead of \$20. The IRS will send the taxpayer a refund of \$5 for 2016 soon after the 2018 return is filed.

Note that after using up \$20 of the \$80 loss from 2018, the taxpayer still has an additional \$60 left to carry forward from 2018. Since there was no taxable income in 2017, nothing is used up by 2017.

Next, assume the taxpayer has for 2019 \$30 of income, and \$20 of deductions (not counting any carryforwards), for \$10 of taxable income. The taxpayer is entitled to carry forward to 2019 \$10 of the \$60 NOL left over from 2018. Thus, under section 172, the tax for 2019 is \$0. In addition, the taxpayer still has \$50 of NOL from 2018 to carry forward to 2020 and beyond through 2038.