the least tax-efficient. But, because of its much lower turnover, the benefit of tax deferral is much lower than Asset Class 2.

Based on the example in "Deferral Benefit," you might think that we've settled on tax drag as the best measure to determine the tax deferral benefit of an asset class. But, that's still not quite right. Though tax drag is a better measure of tax deferral benefit than tax rate or expected return alone, it fails to account for the effects of compounding on any tax deferral benefit.[2] As "Effect of Compounding," p. x, illustrates, when we examine the returns over a long period of time, the tax deferral benefit of each asset class changes. After 20 years, the tax deferral benefit of Asset Class 1 is almost 300 percent, confirming conventional wisdom.

So, why is this the result? Simply put, the tax liability saved each year will grow at the asset class's rate of return. The greater the annual return, the more powerful the cumulative tax deferral benefit, even if the tax drag is lower. In fact, return can have such an outsized effect on the long-term tax deferral benefit, that some asset classes that have a relatively low tax drag can exhibit surprisingly strong long-term tax deferral benefit.

New Evaluation Metrics

Taking all of this together, we make use of metrics that can help evaluate the utility of owning any asset class in a tax-free environment: one for vehicles like PPLI, in which taxes should never be realized, the tax-exemption multiple (TEM) and its counterpart for vehicles like PPVA, when taxes might ultimately be paid, the tax-deferral multiple (TDM). The multiples measure the combined effects of tax drag and compounding to understand the overall tax-exemption (or tax-deferral) benefit over a given period.

"Better Predictors," p. x, demonstrates that, compared to tax drag, both TEM and TDM more accurately predict the long-term tax deferral benefit of an asset class. In this example, we assume that in Year 20, the portfolio will pass without income tax (TEM) or will be fully withdrawn and taxed (TDM). In both cases the TEM and TDM are superior predictors of the asset class with the greatest tax deferral benefit in Year 20.

Next, we put the metrics to work in actual asset classes. "Asset Class Assumptions and Tax Deferral Benefits," p. x, shows a number of asset classes with our long-term (10 year) expected returns, yield and turnover. We calculated tax drag in the conventional way and also calculated TEM (20 years) and ranked them by TEM.

An interesting observation from this chart is that hedge funds aren't among the top five asset classes offering the greatest utility in a tax-exempt environment. In fact, they aren't even in the top 10. This casts serious doubt on the conventional view that hedge funds are

An interesting observation from our chart is that hedge funds aren't among the top five asset classes offering the greatest utility in a tax-exempt environment.

Effect of Compounding

Over time, the tax deferral benefit of each asset class changes

	Value After One Year—Taxable	Value After One Year—Tax-Free	Difference in Value After One Year (Tax Deferral Benefit)	Value After 20 Years Taxable	Value After 20 Years Tax-Free	Difference in Value After 20 Years (Tax Deferral Benefit)
Asset Class 1	$11.3 million	$11.4 million	$112,000	$112.8 million	$137.4 million	$24.6 million
Asset Class 2	$10.7 million	$10.8 million	128,000	$36.7 million	$46.6 million	$9.9 million

Note: Assumes an initial value of $10 million, and capital gains tax rate remains constant. Returns exclude management fees. All values in U.S. dollars.

— Deutsche Asset & Wealth Management