The Impact of the 2003 Tax Law on College Savings Options

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As the cost of college continues to escalate, financing a college education has become more challenging than ever. For parents who anticipate paying a substantial portion of college expenses with saving, it is important that they start college planning as early as possible. Fortunately, there are many savings options available including those especially designed for saving for college such as 529 plans and Coverdell education savings accounts. Another option that offers some tax advantage is an account opened under the Uniform Gift/Transfer to Minors Act. Of course, parents can always save with taxable mutual funds.

With many savings options available, parents often find themselves overwhelmed when it comes to choosing the right option(s) for their family. Moreover, frequent tax law changes make the college saving landscape all the more complex. For example, the Jobs and Growth Tax Relief Reconciliation Act of 2003 (2003 Tax Act), signed into law in May 2003 made significant changes to provisions governing long-term capital gains and dividends. Highlights of these changes include: (1) the long-term capital gains tax has been lowered from 10% to 5% through 2007 (and 0% in 2008) for those in the 10% and 15% federal income tax brackets and from 20% to 15% through 2008 for those in higher tax brackets, and (2) the tax rates on dividends will be the same as those for long-term capital gains. (*Note: these tax rate reductions is scheduled to expire on December 31, 2008. Congress may or may not extend these reductions beyond 2008*.)

In light of the above tax law changes, this article presents some numerical analysis that compares saving with a 529 plan, Coverdell, UGMA, and taxable mutual fund for several scenarios. Before discussing the results, let us first take a look at the tax advantages of each of these options.

529 Plan: earnings on qualified withdrawals are exempt from federal income tax and in most states, state income tax as well. (*Note: the federal tax-free treatment of earnings on qualified 529 withdrawals is scheduled to expire on December 31, 2010. Congress may or may not extend the law beyond 2010*). Some states also allow contributions to be deducted from state income tax (usually up to an annual maximum).

Coverdell: earnings on qualified withdrawals are exempt from federal and state tax. For single taxpayers with modified adjusted gross income below $95,000 or joint taxpayers with income below $190,000, up to $2,000 per year can be put away in Coverdells for the same beneficiary.

UGMA: UGMA or UTMA accounts are irrevocable gifts to minors and can be a useful estate-planning tool for families who wish to reduce their tax payments. When the minor child is under 14, the first $750 of unearned income is exempt from federal and state tax, the next $750 is taxed at the child's rate, and the remaining portion is taxed at the parents' rate. After the child turns 14, all earnings are taxed at the child's rate.

Mutual Fund: no special tax benefits. Earnings are taxed in the year realized. For stock mutual funds, realized capital gains from stock appreciation is subject to long-term capital gains tax, if the assets in the mutual fund have been held for more than a year.

Detailed assumptions used in the analysis are described in Table 1. In order to compare various savings options on an apples-to-apples basis, the analysis assumes that all savings options invest in stock mutual funds with the same return. The assumed annual return is 6.0%. The analysis also assumes an 18-year investment horizon with annual contributions of $2,000 deposited at the beginning of each year. This 18-year horizon can be considered as representing the time period available for parents saving for a newborn child.

Table 1. Assumptions for the Analysis

1) Annual rate of return is 6.0% for all savings vehicles.
2) For the mutual fund and UGMA accounts, each year stock gains are assumed to be distributed as 100% long-term capital gains.
3) Parents' federal long-term capital gains tax rate:
20% before the 2003 tax law changes and 15% (for the entire investment horizon) after.
4) Child's federal long-term capital gains tax rate:
10% before the 2003 tax law changes and 5% through 2007 (and 0% from 2008 on) after.

5) Parents' state income tax: 6%, federal income tax: 25%.
6) Child's state income tax: 1.5%, federal income tax: 10%.
7) These calculations assume that the federal law allowing tax-free qualified 529 withdrawals gets extended beyond December 31, 2010.
8) This analysis is for illustrative purposes only and does not reflect actual performance, or predict future results, of any 529 savings plans or other type of savings vehicles noted above.

The 529 plan is assumed to have annual expense charges of 65 basis points (bps), which corresponds to Missouri's 529 plan (the analysis considers Missouri state residents as an example). There are two different fee scenarios for other options. In one scenario, other savings options are assumed to charge 65 bps annual fees as well. In a second scenario, other savings options are assumed to charge 18 bps annual fees, which corresponds to a low-cost equity index fund.

The top panel of Table 2 shows that when fees are equalized, an investor would have the same amount of assets in the 529 plan and the Coverdell, both before and after the 2003 tax law changes. This is not surprising given the 2003 Tax Act does not change the provisions of these savings vehicles and earnings from both of these vehicles are tax-free.

Table 2. Accumulations in a 529 Plan vs. Other Savings Vehicles
$2,000 Annual Contributions, 18-year Investment Horizon
***Not Reflecting* the Value of State Tax Deductions for the 529 Plan**

Scenario A		
529 Plan Expense Ratio:	***0.65%***	
Expense ratio for other savings vehicles:	***0.65%***	
	Before 2003 Tax Law Changes	***After 2003 Tax Law Changes***
Final After-tax Accumulation		
529 Plan	$61,248	$61,248
Coverdell	$61,248	$61,248
UGMA	$58,775	$60,752
Mutual Fund	$53,121	$54,584
529 Plan Advantage over		
Coverdell	**0.0%**	**0.0%**
UGMA	**4.2%**	**0.8%**
Mutual Fund	**15.3%**	**12.2%**
Scenario B		
529 Plan Expense Ratio:	***0.65%***	
Expense ratio for other savings vehicles:	***0.18%***	
	Before 2003 Tax Law Changes	***After 2003 Tax Law Changes***
Final After-tax Accumulation		
529 Plan	$61,248	$61,248
Coverdell	$64,304	$64,304
UGMA	$61,264	$63,572
Mutual Fund	$55,032	$56,691
529 Plan Advantage over		
Coverdell	**-4.8%**	**-4.8%**
UGMA	**0.0%**	**-3.7%**
Mutual Fund	**11.3%**	**8.0%**

The top panel of Table 2 also shows that the 529 plan outperforms the UGMA by 4.2% before the 2003 tax law changes and 0.8% after. Similarly, the advantage of the 529 plan over a taxable mutual fund reduces from 15.3% to 12.2% after the tax law changes. These results indicate that the reductions in the capital gains tax rates do make mutual funds and UGMA accounts more attractive than before. However, the 529 plan and Coverdell are still more advantageous than the UGMA and the mutual fund because of tax-free treatment on earnings.

The bottom panel of Table 2 considers the case in which the Coverdell, UGMA, and mutual fund invest in a low-cost equity index fund with annual expenses of 18 bps. The results show that now the final accumulations in the Coverdell are higher than those in the 529 plan because of the difference in annual expenses. The results also show that the accumulations in the 529 plan and UGMA are about the same before the tax law changes, while the UGMA has a slight advantage over the 529 plan after the tax law changes. The 529 plan outperforms the taxable mutual fund by 11.3% before the tax law changes and 8.0% after.

As mentioned earlier, many states offer state tax deductions on 529 contributions, which is a draw for many investors. For example, the state of Missouri allows 529 investors to deduct up to $8,000 of contributions per taxpayer per year from their state income tax. Assuming the saving in state tax is invested in the 529 plan, how would this enhance the 529 plan? Table 3 shows the results. The top panel shows that when fees are equalized, the 529 plan outperforms all the three other options. The 529 advantage is most pronounced when compared with a taxable mutual fund, amounting to 21.9% before the tax law changes and 18.6% after.

Table 3. Accumulations in a 529 Plan vs. Other Savings Vehicles
$2,000 Annual Contributions, 18-year Investment Horizon
***Reflecting* the Value of State Tax Deductions for the 529 Plan**

Scenario A		
529 Plan Expense Ratio:	***0.65%***	
Expense ratio for other savings vehicles:	***0.65%***	
	Before 2003 Tax Law Changes	***After 2003 Tax Law Changes***
Final After-tax Accumulation		
529 Plan	$64,736	$64,736
Coverdell	$61,248	$61,248
UGMA	$58,775	$60,752
Mutual Fund	$53,121	$54,584
529 Plan Advantage over		
Coverdell	**5.7%**	**5.7%**
UGMA	**10.1%**	**6.6%**
Mutual Fund	**21.9%**	**18.6%**
Scenario B		
529 Plan Expense Ratio:	***0.65%***	
Expense ratio for other savings vehicles:	***0.18%***	
	Before 2003 Tax Law Changes	***After 2003 Tax Law Changes***
Final After-tax Accumulation		
529 Plan	$64,736	$64,736
Coverdell	$64,304	$64,304
UGMA	$61,264	$63,572
Mutual Fund	$55,032	$56,691
529 Plan Advantage over		
Coverdell	**0.7%**	**0.7%**
UGMA	**5.7%**	**1.8%**
Mutual Fund	**17.6%**	**14.2%**

Note: the value of the state tax deduction for the 529 plan is calculated assuming the tax saving is invested in the 529 plan.

The bottom panel of Table 3 shows that when the Coverdell, UGMA, and mutual fund invest in a low-cost equity index fund, the 529 plan still outperform all these options. The state tax deduction has put the 529 plan slightly ahead of the Coverdell, even though the Coverdell has lower annual expenses. The 529 plan outperforms the UGMA and the mutual fund both before and after the tax law changes.

The above analysis shows that the 2003 tax law changes have made UGMAs and taxable mutual funds more attractive than before. However, in most cases considered in this analysis, 529 plans and Coverdells are still better suited for saving for college because of the tax-free treatment on earnings. The 529 plans become even more appealing when contributions are deductible from state income taxes.