

Why 529 College Savings Plans Favor the Fortunate

College costs have skyrocketed 82 percent over the past decade, prompting more and more families to turn to private savings accounts, or 529 savings plans, to pay for higher education.¹ These plans allow parents to put away money for their child's college expenses in accounts where investment earnings are allowed to grow tax-free until the child is ready for college.² Today, every state sponsors at least one 529 plan, and families have more than 10 million accounts, assets of which have increased from \$14 billion to \$135 billion in the last decade.³

Despite their popularity, 529 savings plans have a remarkably poor track record. The plans rely on the power of compounding stock market returns to finance higher education. But the recent collapse in stock market prices diluted that power, as parents who had been carefully putting away money for years suddenly watched those account balances plummet in a matter of months. The Great Recession made clear what should have been obvious all along: Market rises and falls create huge winners and losers, based solely on luck and timing. Thus, for 529 savings account owners, *when* their child enters college matters far more than how much they have saved for it.

In their present form, 529 savings plans have been in use nationwide only since 2001; so, no one has had a full 18 years for the plan to mature.⁴ But using a hypothetical family's contributions, along with real college costs and the average annual rate of return for the Standard & Poor's 500, we can calculate the value of savings plans over time and illustrate the influence of market volatility and the importance of timing. These calculations represent more accurate depictions of what might happen to real investors than simply looking at long-term market averages, which mask swings in either direction.

Chart 1 assumes 529 savings plans have been in existence for the past 40 years and shows the number of years a student could afford to attend a public or private four-year university using only the savings account. The chart assumes families will make annual contributions of \$1,000 (in 2010 dollars) from the time a child is born until age 18, when he is expected to enroll in college. For costs, the chart uses the actual unadjusted cost of tuition, fees, room, and board at the average four-year public and private university.⁵ The results vary greatly depending on the year a student enters college. A student entering a public college in 1997, for example, could have paid for as much as 4.27 years of college, while a student entering in 2008 could have paid for only .72 years. The figures for private colleges show a similar pattern.

Why the large differences? The first reason is that states deal with recessions by cutting contributions to public colleges and universities. This leads to rising tuition



CHART 1
529 plans favor
the lucky

18 years of investing \$1,000 a year in a 529 plan would have earned enough for...



It's all about timing...

Investors starting in 1979 would have earned enough by 1997 for

4.27 OR **1.84**
 years of public college OR years of private college

But investors starting in 1990 would have enough by 2008 for only

0.72 OR **0.32**
 years of public college OR years of private college

Tuitions rise when students can least afford it...

2000 grads saw their tuition increase
 But the market grew money by

13.6%
 for public college
14.5%
 for private college

236%
 percent

2010 grads saw their tuition increase
 But the market grew money by only

19.0%
 for public college
18.0%
 for private college

14.0%
 percent

Note: Chart assumes families will make annual contributions of \$1,000 (in 2010 dollars) from the time a child is born until age 18. It uses real inflation rates and real annual returns for the S&P 500. For costs, it uses the actual unadjusted cost of tuition, fees, room, and board at the average four-year public and private university as calculated by the College Board's 2009 "Trends in College Pricing" report.
 * For future years, the chart uses 2009-10 college costs and assumes no change.

and fees for students at a time when they can least afford it. For example, 2010 public and private graduates saw their tuition rise 19 and 18 percent respectively. Compare that to the 13.6 and 14.5 percent increase 2000 public and private grads faced. Second, and far more importantly, 2000 graduates witnessed the market grow their money by 236 percent since birth, while 2010 graduates had only gained about 14 percent on their investments. Ideally, 529 savings plans would have helped to defray the unexpected cost increases.⁶ In reality, students attending college at the “wrong” time get both higher costs and less money to pay for them.

In other words, inherently unpredictable events dramatically affect 529 results. Students graduating in 1990 would have attended school during the savings and loan crisis of the late 1980s, and their accounts likely would have taken a significant hit. If those same students had graduated 10 years later, in 2000, their 529 accounts would have been buoyed by the technology boom and the longest bull market in modern history. The market’s rise would have completely covered their college costs. Compare those students’ experience to the public college freshman whose parents sat her down at the kitchen table in the fall of 2008 to explain that the 529 account they had been diligently contributing to for 18 years would be exhausted by March of the following year.

As states decrease their investment in higher education, more of the burden of paying for college shifts to individuals and families. The result is a greater reliance on 529 savings plans. But this option depends on key assumptions to work as planned, such as the belief that the stock market, based on historical averages and given enough time, will always rise. This assumption is touted by the 401(k) industry, which encourages long-term investments in the stock market as a way to pay for retirement. But saving for college is not like saving for retirement. The shorter time horizon of saving for college—18 years for traditional college students compared to 40+ years for retirement—increases risk and volatility. And, unlike retirement, college typically cannot (and often should not) be delayed for a year or two if investments turn sour. Students who enter college immediately after high school have a greater chance of eventual graduation.⁷

As with 401(k) plans, in order to protect their savings from the harsher swings in the market, 529 plan owners are advised to park their investments in more conservative options as the time the money will be needed nears. But the most recent stock market crash made clear that even state-sponsored “conservative” investment options lost vast amounts of money in assets that were riskier than advertised. In the midst of the Great Recession, 529 funds sponsored by Maryland and Virginia lost as much as 30 percent of their value in less than a year.⁸ In North Carolina, a fund that promised to automatically decrease the risk of its investments as participants neared college age lost 30 percent of its value in the first 11 months of 2008, even though plan members were only a year from college.⁹

Even with their unpredictable nature, 529 plans remain popular because of their tax benefits. In addition to the roughly \$600 million annual federal income tax subsidy, 34 out of 43 states with income taxes provide their own incentives through deductions or credits. A 2009 Treasury report found that tax incentives matter most for middle- and high-income households. The value of tax deductions correspond to tax rates, meaning individuals paying higher taxes see greater benefits. For high-income households, the tax advantages of financing college expenses through 529 plans can amount to as much as a 39 percent advantage over traditional taxable savings accounts.¹⁰ For middle-income families, the advantage was 35 percent, but for low-income families, it was only 22 percent.

It is no surprise, then, that wealthy families are more likely to participate in 529 plans. **Chart 2** shows 529 plan participation by income in the state of Kansas. Although 80 percent of Kansas taxpayers earned less than \$75,000 in 2007, they collected only 10 percent of the 529 tax deductions. In contrast, only 1 percent of Kansans earned more than \$250,000, yet they claimed 37 percent of the total tax benefits for 529 plans. The average deduction for wealthy Kansans was nearly five times larger than the ones claimed by Kansas residents earning less than \$50,000. Publicly available data from other states confirm that the benefits of 529 savings plans tend to be concentrated among the wealthy.

CHART 2

529 plans favor the rich

Distribution of 529 tax benefits in Kansas, 2007

Federal adjusted gross income (\$ thousands)	Share of tax returns (%)	Share of 529 deductions (%)	Average deduction (\$)	Total deductions (\$ millions)
0–50	67	4	2,189	3.6
50–75	13	6	2,308	5.5
75–100	8	9	2,672	9.0
100–250	9	44	4,639	42.7
250+	1	37	10,323	36.4

Source: Kansas Department of Revenue and IRS Statistics of Income (<http://www.irs.gov/taxstats/article/0,,id=171535,00.html>)

While helping families afford higher education is a worthy public policy goal, federal and state tax codes may not be the best way to accomplish it. Market volatility makes results vulnerable to luck and timing, and tax advantages mean such policies are more likely to benefit the wealthy. To pay for 529 savings plans, the federal government will be forgoing \$2.9 billion in lost revenue from 2010–2014.¹¹ That money would be better used to boost programs that directly help students afford college who would otherwise not be able to.

The U.S. Department of Education spends nearly \$150 billion per year backing student loans and providing a variety of higher education grant programs primarily

targeted to low- and moderate-income students. State governments directly subsidize public higher education for nearly three-fourths of the undergraduate students nationwide, in addition to offering their own grant and loan programs. Each of these options provides a better way to make college affordable than unpredictable and poorly targeted 529 plans.

Notes

1. This is in 2010 dollars. “Trends in College Pricing 2009” (Washington, D.C.: The College Board).
2. Qualified higher education expenses include tuition and fees and room and board.
3. Data available from the College Savings Plans Network at: <http://www.collegesavings.org/529PlanData.aspx>
4. Congress created 529 plans in 1996, but a 2001 law made distributions from the accounts for qualified education expenses entirely free from federal taxes.
5. The chart uses the average annual returns for the S&P 500. For college costs, it uses the College Board’s “Trends in College Pricing” average for public and private four-year tuition, fees, room, and board.
6. This is especially true for prepaid 529 plans, a version of 529s that allow the owner to lock in current tuition rates by making upfront cash payments. As of March 2009, only 17 states offered prepaid 529 plans. Of these, only 12 were accepting new members, and only 40 percent provided guarantees to investors that promises could not be watered down in the case of a recession (Student Lending Analytics Blog: http://studentlendinganalytics.typepad.com/student_lending_analytics/2009/03/prepaid-college-tuition-plans-not-a-guarantee.html).
7. “Waiting to Attend College: Undergraduates Who Delay Their Postsecondary Enrollment,” (Washington, D.C.: National Center for Education Statistics, June 16, 2005).
8. Nancy Trejos, “529 Savings Plans Battered in Downturn; Parents Reconsider Investment Strategy,” *The Washington Post*, October 19, 2008.
9. Ron Lieber, “Saving for College Wisely in a Treacherous Time,” *The New York Times*, January 3, 2009.
10. “An Analysis of Section 529 College Savings and Prepaid Tuition Plans,” (Washington, D.C.: The Department of the Treasury, September 9, 2009).
11. “Estimates of Federal Tax Expenditures for Fiscal Years 2010–2014” (Washington, D.C.: Joint Committee on Taxation, December 15, 2010).