
529 Plans and Income Tax Policy

The Minnesota College Savings Plan

529 plans (also known as Qualified Tuition Plans or QTPs) provide federal and state tax benefits to families saving for college in these state-operated plans.

This information brief provides information on:

- The federal and Minnesota income tax treatment of 529 plans;
- The Minnesota College Saving Plan (Minnesota’s 529 plan), including its matching grant program;
- Who uses and benefits from 529 plans; and
- Other states’ tax benefits for 529 plans contributions, along with a comparison of the advantages and disadvantages of tax deductions with matching grants, such as those provided by the Minnesota plan.

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Summary

529 Plan Tax Benefits and Qualifying Rules

529 plans offer federal and state income and estate tax benefits to their owners. 529 plans, state-operated college savings plans, allow parents and others to save for college costs in special accounts. Investment income on 529 accounts is exempt from both federal and Minnesota income taxes, if the income is used for qualifying higher education expenses. 529 plans also offer estate and gift tax benefits to their owners. Individuals can invest in any state's 529 plan and qualify for the federal and Minnesota tax benefits.

A variety of restrictions apply to 529 plan accounts under federal law, but the plans offer a fairly flexible option for college savings that is available to all families. Under federal law, only states and higher education institutions may operate 529 plans and invest plan assets, but states can and do offer a wide array of investment options. Owners can open multiple accounts and may transfer amounts among different accounts (once per year), giving them some control over investments. Substantial amounts may be contributed to 529 accounts; contribution limits vary from state to state but typically equal or exceed \$250,000 per beneficiary. Unlike most other tax incentives and aid programs for higher education, no income limits apply to 529 plans. Even the highest income families qualify to use them. Investment earnings on the accounts are exempt from tax if they are used to pay tuition, fees, room and board, books, and some other education expenses. Investment income on the accounts that is used for nonqualifying purposes is taxed as ordinary income, plus a 10-percent penalty. Federal financial aid rules treat parent-owned accounts as assets of the parent, not the beneficiary (generally the child). This reduces the financial aid "penalty" from saving, as compared with direct transfers to the child.

Minnesota's 529 Plan

The Minnesota College Savings Plan began operating in 2001; its design includes a matching grant program. Minnesota enacted legislation authorizing its 529 plan, the Minnesota College Savings Plan, in 1997. The plan began operations in 2001 with administration and investment management services provided by TIAA-CREF, a large national financial institution. The state partially matches contributions to the Minnesota College Savings Plan for families with incomes up to \$80,000. The maximum annual match is \$400 (effective for 2008 contributions; the 2007 limit was \$300). The rate of the match varies with income; a 15-percent rate applies for families with incomes up to \$50,000 and a 10-percent rate for those with incomes from \$50,000 to \$80,000. The state retains ownership of the match amounts and they may only be used for qualifying education expenses of the beneficiary.

Participation in 529 Plans

National participation in 529 plans is substantial; by the end of 2007 total 529 plan assets were \$130 billion. Upper income families are the biggest users and beneficiaries of 529 plans. The structure of the program as an income exclusion provides a larger tax benefit to taxpayers in higher federal and state tax brackets. In addition, these families typically can most easily fund

the accounts. Evidence from several surveys suggests that the median income of 529 plan contributors is about \$100,000.

By the end of 2007, the Minnesota plan had total assets exceeding \$600 million for over 30,000 account owners and 45,000 beneficiaries. Participation in the matching grant program is low; only about 7 percent of beneficiaries for whom contributions are made typically apply for and receive matches. The reason for this is unclear, but the most plausible explanations are the income limits and that individuals making small contributions choose not to apply for grants of only \$20 to \$50.

State Incentives to Use 529 Plans

Many states provide state tax deductions for contributions to 529 plans. In addition to the tax benefits provided under the federal and Minnesota income taxes, 33 states also allow a state income tax deduction for contributions to 529 plans and two states provide a tax credit for contributions. Most of the deductions are subject to dollar caps and must be made to the state's own plan, although a growing number of states allow deductions for contributions to any state's plan. Most of these deductions offer benefits that are comparable to or less than the financial benefit of Minnesota's matching grant for qualifying families. However, unlike the Minnesota matching grant program, none of these deductions are subject to income limits. In addition, 13 states have no dollar limits on their deductions. These states provide a larger financial benefit than the Minnesota match for large contributions.

A few states, like Minnesota, provide matching grants to some participants in their plans. In addition to Minnesota, seven states have general matching grant programs. Two states also have pilot matching grant programs. Unlike Minnesota, all of these states also offer state tax deductions. The matching grant programs are typically targeted to lower income families who would derive little benefit from a state tax deduction. The parameters of the programs are somewhat comparable to Minnesota's.

State tax deductions and matching grant programs each have differing policy advantages. On balance, matching grant programs probably offer more policy benefits than do state tax deductions. One of their primary advantages is favorable treatment under the federal income tax. Matching grants are not subject to federal tax, while state tax deductions reduce the federal itemized deduction for state income taxes, diluting their benefits to many recipients by 10 percent to 35 percent. A matching grant program ensures its benefits are used for higher education, since grants are deposited in accounts that may only be used for education. By contrast, there is no guarantee that tax reductions from a deduction actually increase contributions, and the deduction applies to contributions that could later be used for nonqualifying purposes (although subject to the federal penalty). A state tax deduction typically will have lower administrative costs, since most of its fixed costs are already covered by the state income tax system. A deduction also is better designed to encourage participation in any state's 529 plan. Tax incentives may be more successful in stimulating participation in the plans, although this is far from clear.

Introduction

This information brief is organized into four sections, as follows:

The first section of the brief contains:

- A description of the federal and state tax benefits provided under 529 plans;
- A summary of the various qualifying rules that apply to 529 plans under federal law; and
- A discussion of how 529 plans interact with other income tax benefits for higher education.

The second section of the brief describes the Minnesota College Savings Plan. (A more detailed description of the plan can be found in the Appendix.)

The third section of the brief provides some basic information on participation in 529 plans, both nationally and in Minnesota, including the income characteristics of families using the plans.

The fourth section of the brief:

- Describes the tax and matching grant benefits that other states provide to 529 plan participants;
- Compares state tax deductions for 529 plan contributions with a matching grant program, such as Minnesota's; and
- Concludes with a brief note on whether use of 529 plans stimulates savings.

529 Plan Rules—Tax Benefits and Qualifying Rules

529 plans provide federal and state tax benefits for college savings

529 plans or Qualified Tuition Plans (QTPs)¹ are federally authorized plans, operated by states or eligible private higher education institutions, which provide tax incentives for savings to pay for higher education costs. The plans are named after the section of the Internal Revenue Code (section 529) that sets out their rules.

529 plans are divided into two types:

- Pre-paid tuition plans
- Savings or investment account plans

As the name implies, a pre-paid tuition plan allows a participant to pay tuition *in advance* at a specific higher education institution or a group of institutions. This locks in the tuition amount against future price or rate increases. A savings or investment account plan, by contrast, allows the participant to deposit money in an account that will be invested by the manager of the plan

¹ This is the term that the Internal Revenue Code uses for the plans. I.R.C. § 529(b)(1). Financial service firms that market the plans and the popular press most often refer to them as 529 plans.

and, then, can be used later to pay for higher education costs. Minnesota only offers the latter type of plan, the savings account plan.²

529 plans provide federal and Minnesota income tax benefits, as well as advantages under the federal and Minnesota estate and gift taxes.

Under a 529 plan, the earnings of the account—for example, interest, dividends, and capital gains—are free of federal and Minnesota income tax, if they are spent on qualified higher education expenses. This income tax benefit is typically thought of as having two parts:

- Deferral of the requirement to pay tax on earnings until they are taken out of the account (when they are “distributed”)³
- Full exemption from tax, if the amounts are used for qualifying higher education expenses

Although the ability to earn tax-free investment income is the primary tax advantage of 529 plans, these accounts also have estate and gift tax advantages:

- Amounts deposited in 529 plan accounts qualify for the annual gift tax exclusion (\$12,000 for gifts in 2008).⁴ In addition, a special rule allows donors to elect to use five years of annual exclusions for a gift made in one year. Thus, in 2008 an individual could contribute \$60,000 to a 529 plan account without incurring gift tax liability (and without using the \$1 million lifetime gift tax exclusion).⁵ Married couples can double this, contributing \$120,000 in one year for one beneficiary.

² This information brief only discusses savings account plans and all references to QTPs and 529 plans refer only to those types of plans.

³ Initially, this was the only income tax benefit that 529 plan accounts provided (in addition, the income was taxed to the beneficiary—typically at a lower rate than the contributor or account owner would pay). However, the federal Economic Growth and Tax Relief and Reconciliation Act of 2001 (often referred to as EGTRRA) provided that the income was fully exempt from tax to the extent it was used for qualifying higher education expenses. This exemption was temporary; it was set to expire effective for tax year 2011. The Pension Protection Act of 2006 made this provision a permanent feature of federal tax law. In 2008, Minnesota adopted or conformed to this feature of federal law providing similar Minnesota state tax benefits. [2008 Minn. Laws, ch. 154](#), art. 4, § 2.

⁴ The owner-contributor to a 529 plan retains ownership of amounts in the account until they are distributed to the beneficiary. Under the gift and estate taxes, such an interest would generally be considered a potential or “future” interest. Gifts of future interests generally do not qualify for the annual gift tax exclusion. But section 529 specifies that contributions to a QTP are treated as completed gifts (not future interests) and qualify for the annual exclusion. I.R.C. § 529(c)(2)(A).

⁵ I.R.C. § 529(c)(2)(B). Under proposed regulations, the donor can make additional gifts to use the full exclusion in a later year, if indexing adjustments increase the annual exclusion. For example, assume a donor makes a \$60,000 contribution in 2008 for years 2008 through 2012. If indexing increases the exclusion to \$13,000 in 2009, additional \$1,000 deposits could be made for 2009 to 2012 without incurring gift tax or using the \$1 million exclusion. Prop. Treas. Reg. § 1.1529-5(b)(2)(iv).

- Amounts contributed to a 529 plan account are generally excluded from the estate of the donor for estate tax purposes, even though ownership remains with the donor until distributions are made.⁶

A variety of special rules—beyond those described in the preceding bullets—govern the estate and gift tax implications of 529 plan accounts.⁷ The remainder of this information brief, however, focuses on the income tax benefits of 529 plans and their policy implications.

Minnesota’s tax treatment of 529 plans follows federal law.

Minnesota follows the federal income tax treatment of 529 plans by using federal taxable income as its tax base. As a result, state tax will not apply to a 529 plan account’s annual earnings and distributions will be exempt from tax, if they are used for qualified higher education expenses.

Because it uses the federal taxable estate as its base, the Minnesota estate tax also follows the federal estate tax rules in determining whether 529 plans are taxable.⁸ Minnesota has no gift tax.

Federal and state tax expenditure budgets suggest 529 plans reduce federal and state income tax revenues by modest amounts.

Congressional tax expenditure estimates indicate that 529 plan tax benefits (for both pre-paid tuition plans and savings account plans) will reduce federal revenues by \$700 million for fiscal year 2008.⁹ For Minnesota purposes, the Department of Revenue estimates 529 plans result in a tax expenditure of \$1.4 million for fiscal year 2008.¹⁰

⁶ I.R.C. § 529(c)(1) (exclusion from donor’s estate). Note, however, that if the accelerated use of the annual exclusion is elected, as described in the text, and the donor dies during the five-year period, a portion of the gift will be included in the donor’s estate. For example, if the donor dies after three years, the remaining two years of annual exclusion amounts (measured based on each calendar year beginning after the date of death) are included in the estate. I.R.C. § (c)(4)(C); Prop. Treas. Reg. § 1.1529-5(d)(2).

⁷ The significant planning opportunities that 529 plans afford under the estate and gift taxes have caused the IRS some concern. In January 2008, the IRS issued an advance notice of proposed rulemaking indicating its intent to propose a “general anti-abuse rule that will apply when section 529 plan accounts are established or used for purposes of avoiding or evading transfer tax or other purposes inconsistent with section 529.” Internal Revenue Service, “Guidance on Qualified Tuition Programs Under Section 529,” 73 Fed. Reg. (January 18, 2008): 3441, 3442. This concern reflects the substantial estate and gift advantages that 529 plans provide for wealthy individuals (generally families whose net worth exceed \$4 million—the current threshold or exemption amount for a married couple under the federal estate tax, if they set up their estate plan appropriately; Minnesota’s comparable exemption is \$2 million).

⁸ [Minn. Stat. §§ 291.005](#), subd. 1 (9); [291.03](#), subd. 1.

⁹ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2007–2011* 31 (September 24, 2007).

¹⁰ Minnesota Department of Revenue, *State of Minnesota Tax Expenditure Budget Fiscal Years 2006–2009* 39 (February 2006). This estimate suggests that about \$20 million in investment income on 529 plans owned by Minnesota residents would be subject to state tax at about a 7-percent rate, absent the exemption. (This would yield the \$1.4 million in forgone tax.) When these estimates were prepared, the Minnesota College Savings plan had assets of about \$500 million (including some held by nonresidents), and Minnesotans undoubtedly hold assets in out-of-state plans. (As noted on page 17, the plan’s assets now exceed \$600 million.) If we assume \$500 million is a good proxy for total holding of 529 plan assets, this suggests an annual realized investment return of about 4

Federal law applies a variety of qualifying rules to 529 plan accounts and specifies how 529 plans affect federal financial aid rules

The Internal Revenue Code sets out the eligibility and operating rules for 529 plans. Some of the most basic of these rules relate to the following:

- Investment management
- Account ownership
- Contribution limits and form of contributions
- Designation of beneficiary
- Allowed use of distributions
- Tax treatment of nonqualifying distributions

Investment management: Only a state or an eligible higher education institution (or institutions) may operate 529 plans and they must control investment of the accounts.

All states have hired financial institutions or other private money managers to operate their plans, including providing investment management functions. The plan manager invests the plan's assets, as directed by the state or institution; that is, the account owner cannot select the investments.¹¹ This is unlike an individual retirement account, 401(k) or similar account, where the account owner controls the investments. However, the code, IRS guidance, and state practices effectively give account owners a fair degree of control over investment management. States offer a variety of different investment options that reflect different underlying investments (stocks, bonds, and so forth) and different investment styles (funds tied to passive indexes and a variety of different styles of managed accounts). Account owners can choose to create multiple accounts for the same beneficiary, each with different underlying investments, and can transfer or "roll over" money from one account to another (either within one state's plan or to another state's plan). However, these transfers may be only done once per year.¹²

percent that otherwise would be subject to Minnesota tax. This estimate may be low, if returns are higher than 4 percent and total holdings by Minnesotans (when netting out the nonresident holdings of the Minnesota plan and adding resident holdings of out-of-state plans) exceed \$500 million. Since high-income individuals are the predominant investors in 529 plan accounts, a marginal tax rate higher than 7 percent might be appropriate as well.

¹¹ I.R.C. § 529(b)(4).

¹² I.R.C. § 529(c)(3)(C). One interpretation is that all transfers for a beneficiary for which there are multiple accounts must be made on the same day of the calendar year. Following the literal language of the code, this would apply even if there are multiple account owners (e.g., one owned by a parent and another by a grandparent) for the same beneficiary. It is unclear if the IRS will follow this interpretation.

Account ownership: Accounts are owned and controlled by the individual or entity that created them.

This typically will be a parent, but it can be a grandparent, other relative, or a trust or other entity.¹³ One survey suggests that grandparents, aunts, and uncles contribute to 28 percent of 529 plans.¹⁴

Contribution limits: Limits on contributions vary under state plans.

Federal law does not specify a dollar limit on contributions or the value of an account, but limits contributions to an amount necessary to provide for the qualified higher education expenses of the beneficiary.¹⁵ States, in turn, set dollar limits typically on the total value of the account after which contributions are prohibited. The Minnesota College Savings Plan sets this limit at \$235,000.¹⁶ Other state plans have somewhat higher limits.¹⁷

All contributions to a 529 plan must be made in cash.¹⁸ This prevents the account owner from contributing stock or other securities to avoid recognizing a capital gain.

Designation of beneficiary: The account owner designates an individual as the beneficiary of the 529 plan account.

A plan separately accounts for the amounts for each beneficiary.¹⁹ The account owner can change the beneficiary of the account without incurring income or gift tax liability, if the new beneficiary is a member of the same family.²⁰ “Member of the family,” as defined by the code and the IRS’s proposed regulations, includes the spouse, parent, child, grandchild, brother, or sister of the designated beneficiary. Stepchildren, stepparents, and stepsiblings also qualify, as well as first cousins and spouses of any of the listed relatives.²¹ Inclusion of first cousins allows

¹³ The code authorizes a “person” to contribute to a 529 plan. I.R.C. § 529(b)(1)(A). This is defined by the code to include trusts and a variety of other entities. I.R.C. § 7701(a)(1). There may be estate planning reasons for using a trust as the account owner (e.g., if the individual funding the account is near death or for other reasons).

¹⁴ Investment Company Institute, *Profile of Households Saving for College* (Fall 2003): 41. It is not clear whether the grandparents or other relatives actually owned these accounts or were giving money to parents to contribute to their accounts. This survey is now somewhat out of date, since contributions to and assets of 529 plans have grown substantially since 2003.

¹⁵ I.R.C. § 529(b)(6).

¹⁶ This amount was set by statute for calendar years 2004 and 2005. The statute directs the Minnesota Office of Higher Education (MOHE) to adjust the limit “as necessary.” [Minn. Stat. § 136G.09](#), subd. 8(b). As of August 2007, the limit remains at \$235,000. *Plan Disclosure Booklet and Participation Agreements for Minnesota College Savings Plan* (August 1, 2007): 1.

¹⁷ A number of states have set their maximum limits at or over \$300,000. For example, the Florida plan has a \$341,000 limit (as of June 2008).

¹⁸ I.R.C. § 529(b)(2).

¹⁹ I.R.C. § 529(b)(3).

²⁰ I.R.C. §§ 529(c)(3)(C)(ii) (income tax); 529(c)(5)(B) (gift tax – requires new beneficiary to be in the same generation as the original beneficiary).

²¹ Prop. Treas. Reg. § 1.529-1(c).

grandparents to transfer money among their grandchildren (by different children) without incurring gift tax.

Allowed use of distributions: Distributions that are used for “qualified higher education expenses” are exempt from income taxation.²²

The plan can transfer these distributions directly to the college or other eligible education institution or pay the beneficiary in cash to reimburse qualifying expenses incurred. Eligible institutions are those that can participate in the Department of Education student programs; in addition to colleges and universities, this includes certain proprietary institutions and some postsecondary vocational institutions.²³ Qualifying expenses include:

- Tuition, fees, books, and supplies;
- Expenses for special needs services; and
- Reasonable room and board for a student who is enrolled at least halftime.²⁴

Tax treatment of nonqualifying uses: If the investment income or gain on a 529 plan account is used for nonqualifying purposes, this income is taxable as ordinary income under the federal and Minnesota income taxes.²⁵

To the extent that the income would have consisted of qualifying dividends or long-term capital gain in a taxable account, this means a higher rate of federal taxation applies than if the income had been derived from a taxable account.²⁶ In addition, federal law applies a 10-percent penalty to deter use of the accounts for nonqualifying uses or to simply defer taxes.²⁷ Minnesota imposes no similar penalty.

Federal law treats 529 plans as assets of the plan owner, not the beneficiary, providing favorable treatment for purposes of financial aid.

How college savings (in various different legal forms) affect eligibility for financial aid is an important consideration for many low- and middle-income families. If saving in a 529 plan (as compared with a taxable or other account) reduces financial aid, this is the effective equivalent of a tax. Financial aid practices vary from institution to institution, but in 2004 the U.S. Department of Education adopted rules providing favorable financial aid treatment of 529 plan assets. These rules govern federal aid and are used by many private institutions, as well. They provide that parent-owned 529 plan accounts are treated as assets of the parents, not the

²² I.R.C. § 529(c)(3)(B).

²³ I.R.C. § 529(e)(5); Prop. Treas. Reg. § 1.529-1(c).

²⁴ I.R.C. § 529(e)(3).

²⁵ Distributions that consist of recovery of contributions are not taxed, regardless of whether they are used for qualifying purposes. I.R.C. § 529(c)(3)(A) (annuity rules under I.R.C. § 72 apply to determine what constitutes recovery of contributions).

²⁶ There is no similar effect under the Minnesota income tax, since dividends and capital gain are taxed at the same rate as any other income (e.g., wages, interest, or business profits).

²⁷ I.R.C. § 529(f).

beneficiary. (Generally, 529 plan accounts owned by others, such as grandparents, are ignored for financial aid purposes.) This reduces potential financial aid by a smaller portion of 529 plan assets than if parent-owned accounts were assumed to be owned by the beneficiary (i.e., the student). Also, these rules do not consider the 529 plan's earnings to be income under the financial aid formulas. One analyst has characterized this as "the most favorable treatment of the aid system of all investment options."²⁸

529 Plans' Effects on Other Higher Education Tax Benefits

Use of 529 plans may affect qualification for other federal tax benefits for higher education.

In addition to 529 plans, the federal and Minnesota tax systems offer a panoply of tax benefits to parents and students to help pay higher education costs. These benefits can be divided into two categories: (1) savings incentives (similar to 529 plans) that encourage saving in advance to pay for higher education costs and (2) direct benefits for paying higher education costs. Following is a partial list of the tax benefits. The savings incentives text briefly compares their features to 529 plans, while the direct benefits text describes their interaction with 529 plans. Readers should see the House Research website for more detail on these tax provisions.²⁹

Savings incentives: Alternative tax-favored methods of saving for higher education include:

- Coverdell education savings accounts;
- Exclusion of savings bond interest used for higher education; and
- Shifting investment assets and income to dependents to reduce the applicable tax rate.

These provisions, like 529 plans, are intended to encourage accumulation of savings to pay for higher education costs.

Coverdell education savings accounts (ESAs) are similar to 529 plans in that investment income and gains on the accounts are exempt from federal and Minnesota income taxation, if they are used to pay qualifying higher education expenses. Taxpayers can contribute to both ESAs and 529 plans in the same year. ESAs differ from 529 plans in several ways:

- A \$2,000 annual contribution limit applies (compared with no fixed limit on 529 plans)
- Income limits of \$95,000 to \$110,000 of adjusted gross income (\$190,000 to \$220,000 for married joint filers) apply to contributors (compared with no income limits under 529 plans)

²⁸ Susan Dynarski, "High-Income Families Benefit Most from New Education Savings Incentives," *Tax Policy Issues and Options* (Urban-Brookings Tax Policy Center) 9 (February 2005): 4. Similar financial aid treatment is provided to Coverdell Education Savings Accounts.

²⁹ <http://www.house.mn/hrd/issinfo/hetaxben.htm>; for more detailed and comprehensive information see Pamela J. Jackson, *An Overview of Tax Benefits for Higher Education Expenses* (Congressional Research Service, January 3, 2005) and Joint Committee on Taxation, *Present Law and Analysis Relating to Tax Benefits for Higher Education* (April 29, 2008).

- An ESA owner can direct the investment of the account, similar to an individual retirement account or 401(k) plan (compared with limits on this for 529 plans)
- An 18-year age limit applies to beneficiaries for making contributions (compared with no age limit under a 529 plan)
- ESAs may also be used for qualified elementary and secondary education (529 plans are limited to postsecondary education)
- ESAs are property of the beneficiary, although the contributor can change the beneficiary designation (529 plans, by contrast, remain the property of the account owner who can simply withdraw money from the account and use it for any purpose³⁰)

The **education savings bond program** allows taxpayers to exclude from federal taxation interest on U.S. savings bonds that they redeem in a year in which they pay qualifying higher education expenses (limited to tuition and fees, or contributions to a 529 plan or ESA) for themselves, a spouse, or dependent. Income limits apply (\$98,400 of AGI for married joint filers in tax year 2007, \$67,100 for single and head of household filers). U.S. saving bond interest is always exempt from state income taxation under federal law.

In past years, parents and grandparents often used **uniform transfers to minors** to shift income to their children or grandchildren, so the income would be taxed at their lower income tax rates, with the expectation that these accounts would be used to pay for education costs.³¹ Recently passed federal legislation has made this strategy increasingly ineffective, since much of this income will now be taxed at the parents' rates, even for older children.³² Many financial planners now recommend using 529 plans rather than these types of transfers.

Benefits for paying higher education costs: In addition to savings incentives, federal law provides a variety of tax benefits for direct spending on higher education costs.

Minnesota does not provide benefits comparable to the federal credits or (after tax year 2006) the federal deduction. The following is a partial list of these benefits with a description of how 529 plans relate to or interact with them.

The deduction for tuition and fees allows parents and nondependent students to deduct up to \$4,000 of tuition and fees per year. This provision is scheduled to expire after tax year 2007. Minnesota adopted the deduction for prior tax years, but not for tax year 2007.³³ An income limit of \$65,000 for single and head of household filers (\$130,000 for married joint filers) applies. Tuition and fees paid with distributions from a 529 plan account qualify for this deduction, if the distributions represent recovery of contributions rather than tax-exempt

³⁰ This will trigger taxation and the 10-percent penalty to the extent the withdrawal consists of earnings, rather than recovery of contributions.

³¹ There is no legal guarantee that the account would be used for education, since it becomes the child's property upon attaining the designated age.

³² 2007 legislation increased the age of the child where the parent's tax rate applies from age 14 to age 18 or to age 24 for full-time students. [Pub. L. 110-28 § 8241](#).

³³ The 2008 Legislature explicitly declined to conform to the 2007 federal legislation that extended the tuition and fees deduction through tax year 2007. [2008 Minn. Laws, ch. 154](#), art. 4, § 3.

investment income or gains. If payment is made with distributions of earnings from a 529 plan, it does not qualify for the deduction.

The HOPE credit provides a tax credit of up to \$1,800 in tax year 2008 for tuition and related expenses incurred for the first two years of postsecondary education. Qualification for the credit is income limited so that single taxpayers with modified AGI above \$58,000 for single and head of household filers in tax year 2008 (\$116,000 for married joint filers) do not qualify.³⁴ Payments made with a distribution from a 529 plan qualify for the credit if the distribution represents recovery of contributions rather than tax-exempt investment income or gains.

The lifetime learning credit provides a comparable tax credit in situations where the HOPE credit does not apply. The maximum credit is \$2,000 and, unlike the HOPE credit, this maximum amount is not indexed for inflation. The same income limits apply as under the HOPE credit and the income limits are indexed for inflation. Coordination with 529 plan distributions is the same as under the HOPE credit.

Interaction between 529 plan rules and tax preferences for higher education expenses. 529 plan distributions can be used for broader categories of higher education expenses than can the deduction and credits. 529 plan distributions may be used for room and board, books, supplies, and equipment, while the deduction and two credits may not. This leads to complexity and to a need for careful record keeping by individuals who have 529 plans and qualify for the deduction and credits, since it will be advantageous for them to use distributions of 529 plan earnings to pay for room and board, books, supplies, and equipment, rather than tuition and fees. This maximizes the tax advantage, if use of 529 plan earnings would reduce the amount qualifying for the full deduction or credit.³⁵

The Minnesota College Savings Plan

Minnesota's 529 plan was implemented in 2001 and is similar to plans in other states

The 1997 Minnesota Legislature authorized establishment of Minnesota's 529 plan, the Minnesota College Savings Plan. This legislation followed recommendations by Gov. Arne Carlson.³⁶ The state contracted with TIAA-CREF, a large financial services firm that provides pension, retirement, and mutual fund products, to provide administration and investment management for the plan. The plan began operations in the summer of 2001. The plan is a

³⁴ Both the credit amount and income limit are indexed for inflation.

³⁵ The GAO and the staff of Joint Committee on Taxation have noted these effects and that the interactions "may increase the likelihood of inadvertent errors and may also increase taxpayer frustration." GAO, *Student Aid and Postsecondary Tax Preferences* (July 2005): 24.

³⁶ 1997 Minn. Laws ch. 183, art. 2, §§ 12–16, codified at Minn. Stat. ch. 136G. In the previous session, the governor proposed a state income tax deduction to encourage saving for college by families who received little or no direct state financial assistance for college. Federal authorization of 529 plans created an opportunity to leverage federal tax incentives that would not have been available under the state-only tax deduction proposed in the 1996 legislative session.

direct-sold plan (i.e., it does not provide broker- or advisor-sold products) that is marketed to Minnesotans. As of November 2007, it allowed six investment options. More detail on the features and requirements of the plan are contained in the Appendix.

Minnesota's 529 plan features a matching grant for families with incomes up to \$80,000

The Minnesota College Savings Plan includes a matching grant feature. The matching grant provides grants of up to \$400 to residents who contribute to the plan. To qualify, a minimum contribution of at least \$200 must be made and the beneficiary's family income must not exceed \$80,000. The rate of the match varies based on family income. Families with incomes of \$50,000 or less qualify for a 15-percent match rate, while those with incomes over \$50,000 and up to \$80,000 qualifying for a 10-percent match. Families with incomes less than \$50,000 must contribute at least \$2,667 to receive the maximum \$400 grant; those with incomes from \$50,000 to \$80,000 must contribute at least \$4,000.

Matching grants are funded with a direct biennial appropriation (\$1,020,000 per year in the 2008-09 biennium).³⁷ If the appropriation is insufficient to pay all of the matching grant entitlements based on applications received for the year, each matching grant is proportionately reduced so that the sum of all grants equals the available appropriation. So far, the available appropriations have always exceeded the matching grant entitlements.

Matching grants are credited to an account designated for the beneficiary, but the state retains ownership until the money is actually distributed to the beneficiary for higher education costs. To qualify for a distribution, the beneficiary must have had an account for a three-year period.³⁸ Distributions from a matching grant account may only be made for qualified higher education costs. Unlike a nonmatch 529 plan account, these amounts cannot be withdrawn and used for other purposes by paying taxes and the federal penalty on the amounts. Matching grant amounts may be forfeited under certain circumstances, such as death of the beneficiary.

Participation in 529 Plans

National participation in 529 plans has grown dramatically since 2001

Since Congress exempted 529 plan distributions used for qualifying higher education costs from taxation in 2001, participation in the plans has increased significantly and steadily. In 2001,

³⁷ 2007 Minn. Laws ch. 144, art. 1, § 3, subd. 10. The 2008 Legislature eliminated the fiscal year 2009 appropriation for the grant, but to avoid a direct effect on program participants, the payment date for the matches was changed from June 30 to July 1 (effective 2009). 2008 Minn. Laws ch. 363, art. 4, § 3, subd. 3. Since the state's fiscal year ends on June 30, this shifted the payment to the next fiscal year and resulted in a one-time "savings" of the amount of the annual appropriation.

³⁸ This period includes any time the money was held in another QTP account, including under another state's 529 plan. This three-year requirement is intended to prevent deposits into and withdrawals from accounts (e.g., when the beneficiary is already in college) simply to qualify for the state match. This confirms the purpose of the match to encourage saving, not just provide a grant-in-aid for college costs.

approximately \$13.6 billion in assets were held in 2.4 million accounts. By the end of 2007, total assets had grown to almost \$130 billion in 10.6 million accounts. The annual amounts are shown in Table 1. As can be seen from Table 1, participation surged after the 2001 change exempting qualifying distributions from taxation and participation has grown steadily since. News reports in early 2008 suggest, however, that the economic conditions may be causing this steady growth to slow down in late 2007 and early 2008.³⁹

Table 1
National 529 Plan Participation
(amounts at end of calendar year)

Calendar year	Number of accounts (thousands)	Annual percent change	Total Assets (millions)	Annual percent change	Average account size
2001	2,352		\$13,577		\$5,773
2002	4,380	86.2%	26,849	97.8%	6,130
2003	6,016	37.4%	45,771	70.5%	7,608
2004	7,208	19.8%	64,688	41.3%	8,974
2005	8,189	13.6%	82,485	27.5%	10,073
2006	9,270	13.2%	105,693	28.1%	11,402
2007	10,551	13.8%	129,938	22.9%	12,315

Source: College Savings Plans Network, Program Statistics (various dates); available at <http://www.collegesavings.org/529PlanData.aspx> (last accessed on June 9, 2008)

National evidence suggests that mainly upper income families use 529 plans

529 plans are primarily intended to help middle and upper income families manage higher education costs. For example, when Minnesota adopted its plan in 1996-97, the proponents justified it as a complement to the state’s financial aid programs, which were targeted to low- and lower middle-income families. The tax benefits of 529 plans were also thought to help neutralize some of the savings disincentives that are inherent in need-based financial aid programs—i.e., that saving to pay for college tends to reduce the amount of available need-based aid for the “thrifty” family, while the family that consumes more of its income (choosing not to save) benefits from need-based aid programs.⁴⁰

Both the design of and the circumstances surrounding the use of 529 plans result in their tendency to benefit upper income families:

- 529 plans’ tax benefits are an exclusion from income taxation. An exclusion combined with the progressive rate schedules of the federal and Minnesota income

³⁹ Jilian Mincer, “Slowdown Reaches 529 Plans: Providers See Drop In New Accounts For College Savings,” *Wall Street Journal*, March 6, 2008 (reporting some investment firms were experiencing significant drops in the number of new accounts opening in December 2007 and January 2008 compared with the previous year levels).

⁴⁰ This aid disincentive for savings may be more perception than reality. Parental assets (in excess of \$45,000 to \$50,000) are assessed at a rate of 5.6 percent. This is, however, an annual amount for each year of financial aid. Thus, if one cumulates it for four years of college, the amount is slightly more than a 20-percent assessment.

- taxes provides a larger absolute benefit to higher income taxpayers. For example, married joint filers with incomes of about \$80,000 would derive about a 22-percent tax benefit from the exemption, while a family with a \$500,000 income would typically receive almost twice the benefit (about 40 percent).⁴¹
- Similarly, the estate and gift tax benefits affect only families whose net worth is among the top 2 percent of all families. About 2 percent of decedents' estates are subject to the Minnesota estate tax and less than 1 percent to the federal estate tax with its higher exemption amounts.
 - By the nature of things, families who save significant sums (or have liquid assets to transfer to a 529 plan account) to pay for college costs tend to be more affluent. By contrast, middle and lower income families simply cannot save as easily. Unless they receive offsetting financial aid, these families may expect their children to attend less expensive public institutions or to bear more of the costs of higher education themselves (whether through student loans, work, or otherwise).

As a result, one would expect upper income families (with their higher tax rates and greater ability to fund 529 accounts) to disproportionately use and benefit from 529 plans. Available evidence on the use of 529 plans bears out this tilt toward upper income families. A 2003 survey found that the median family income of 529 plan savers was \$100,000.⁴² Professor Susan Dynarski, using data from the 2001 Survey of Consumer Finance, found that 3 percent of households with children under the age of 16 participated in 529 plans or ESAs. These families had a median income of \$91,000, compared with \$50,000 for all families with children under age 16. The median net worth of families using 529 plans and ESAs was \$281,200 versus \$61,830 for all similar families.⁴³

These data may not accurately reflect the present income distribution of 529 plans' usage and assets. 529 plan assets have grown dramatically since 2001 (the year Professor Dynarski's data was collected). In 2001, total assets in 529 plans were about \$14 billion. By the end of 2007, total assets had increased to \$130 billion as shown in Table 1. More affluent families may simply have been early adopters of 529 plans. With the passage of time, use of 529 plans may have spread to more middle and lower income families.

To test this possibility, we calculated the median income of households with 529 plan or ESA assets using 2004 *Survey of Consumer Finance* data.⁴⁴ The median income of households with

⁴¹ These examples assume that a family with \$80,000 income would typically be subject to the federal rate of 15 percent and the Minnesota rate of 7.05 percent for a combined rate of 22 percent (assuming that they don't itemize deductions, reducing further the benefits of the state exclusion). By contrast, the high-income family would pay the 35-percent federal rate and the 7.85-percent rate for a combined rate of about 40 percent (assuming that they itemize deductions and, thus, realize about a net 5-percent Minnesota tax benefit).

⁴² Investment Company Institute, *Profile of Households Saving for College* (Fall 2003): 42.

⁴³ Susan Dynarski, "Who Benefits from Education Saving Incentives? Income, Educational Expectations and the Value of the 529 and Coverdell," *National Tax Journal* 52 (2004): 359, 364.

⁴⁴ Data for the 2007 survey is not yet available. The 529 plan and ESA asset data from the 2004 survey was combined with Medical Savings Account (MSA) asset data. However, Federal Reserve Board staff indicated to the authors in an e-mail that only five or fewer survey respondents reported MSA assets. Thus, it seems safe to ignore this limitation of the data.

529 plan and ESA assets was just under \$114,000, suggesting that higher income households continue to be the predominant users of the accounts.⁴⁵ By comparison, the median income for all households was just over \$43,000. This pattern may have changed in the three years since the survey was conducted. Participation in 529 plans has continued to increase since 2004. Whether this increased participation by lower and middle income households in higher proportions than higher income households remains to be seen.

The median income of owners of 529 plan accounts provides only a partial picture of the distribution of the benefits of 529 plan tax incentives. Table 2 shows the distribution of 529 plan and ESA assets by income group, based on data drawn for the 2004 *Survey of Consumer Finance*. It shows that 529 plan and ESA assets are concentrated in the top income groups with over 67 percent held by the top decile (the 10 percent of the population with the highest incomes) and over 80 percent in the top quintile (the top 20 percent by income). The far right column of the table shows the percentage of households in each income group that have some 529 plan or ESA assets.

Table 2
529 Plan and ESA Assets by Income of Account Owners
(amounts in 2004 dollars)

Income category	Median income*	529 plan and ESA assets (000)	% of total	% of households with assets
1 st quintile (0 – 20%)**	\$11,296	\$178,456	0.2%	0.0%
2 nd quintile (20% – 40%)**	25,672	196,625	0.2%	0.1%
3 rd quintile (40% – 60%)**	43,129	2,963,328	3.4%	1.5%
4 th quintile (60% – 80%)	67,774	11,416,287	13.2%	3.0%
9 th decile (80% – 90%)	104,741	13,707,740	15.8%	6.0%
Top decile (90% – 100%)	184,838	58,192,663	67.2%	10.0%
Total	\$43,129	\$86,655,099	100%	2.5%

* Median income of all households in income group, not just those with assets.
 ** Based on ten or fewer respondents with 529 plan or ESA assets; may not be reliable as to those amounts.
 Source: Federal Reserve Board, *Survey of Consumer Finance* data (2004).

Analyzing ownership by net worth, rather than income, reinforces the conclusion that 529 plan and ESA use is concentrated among affluent households. Dividing households with 529 plan and ESA assets in quintiles based on net worth reveals that 45 percent of the assets are held by the top net worth quintile (households with a median net worth just under \$2.5 million). The median net worth of all households with 529 plan and ESA assets is \$405,000, while the median net worth of all households is about \$68,000. (All of the reported amounts are in 2004 dollars.)

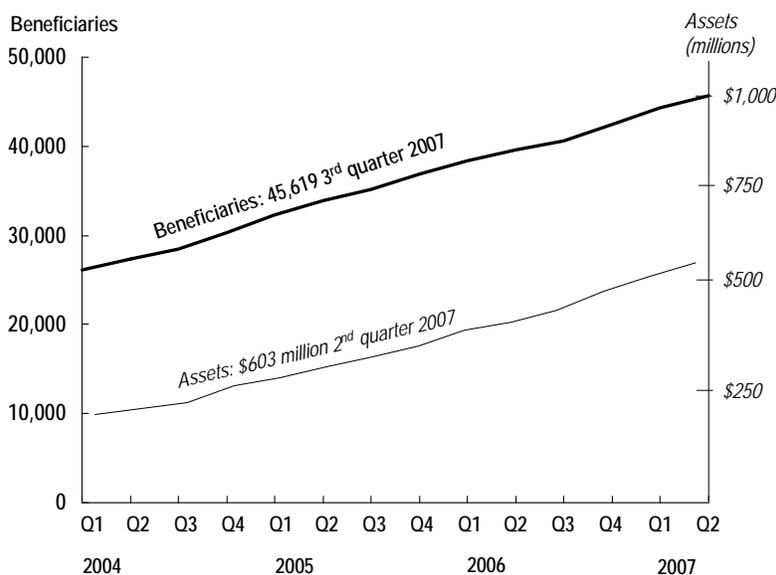
⁴⁵ These amounts are not strictly comparable to Professor Dynarski's results, since they are for all owners of 529 plan and ESA assets. She computed the amounts for households with children under the age of 16. Since a good share of 529 plan assets (perhaps 15 percent to 20 percent) are held by households other than parents (e.g., grandparents and other relatives), we computed medians for all holders of 529 plans and ESA assets.

Minnesota Participation

Overall participation. As of October 19, 2007, over 30,000 account holders maintained Minnesota College Savings Plan accounts for over 45,000 beneficiaries.⁴⁶ The plan had total assets exceeding \$629 million, of which \$627.6 million was in owner accounts and \$1.5 million in matching grant accounts. Of the account owners, 83 percent were Minnesota residents and over 70 percent of them were between 30 and 49 years of age, as one would expect for parents saving for their children’s education. Plan assets and the number of designated beneficiaries have grown steadily over the last three and one-half years. Figure 1 shows the growth in total assets of the plan and the number of beneficiaries between the first quarter of 2004 and the second quarter of 2007.

Figure 1

Minnesota College Savings Plans: Assets and Number of Beneficiaries



Participation in the matching grant program. During 2006, Minnesota matching grants were awarded for about 2,300 beneficiaries. Table 3 provides details on the number and amount of matching grant awards by size of the matching grant and family income category. As can be seen from Table 3, about two-thirds of the participants in the program (1,526) have incomes in the higher tier (\$50,000 to \$80,000 of income). However, the grant awards are about equally divided between the two income groups. MOHE staff indicated that contributions made in amounts sufficient to qualify for the maximum matching grant are often made by grandparents. These contributions resulted in over one-half of the amount of grants in the lower income

⁴⁶ All of the data reported in this section of the information brief was provided by MOHE staff on October 26, 2007. As of December 31, 2007, the College Savings Plan Network reported the Minnesota plan had \$664 million in assets for almost 54,000 accounts or contracts.

bracket. Approximately 14 percent of grant recipients received the maximum allowable grant of \$300.

Table 3
**Minnesota College Savings Plan
Number and Amount of Matching Grants
By Size and Family Income
Calendar Year 2006 Contributions/Fiscal Year 2007 Grants**

Grant size category	Income of \$50,000 or less				Income \$50,000 to \$80,000				All Recipients			
	Number	% of total	Amount	% of total	Number	% of total	Amount	% of total	Number	% of total	Amount	% of total
Less \$100	349	15.1%	\$21,171	8.6%	1,109	48.1%	\$42,433	17.3%	1,458	63.2%	\$ 63,604	26.0%
\$100 to \$199	168	7.3	24,899	10.2	244	10.6	31,334	12.8	412	17.9	56,233	23.0
\$200 to \$299	45	1.9	11,178	4.6	66	2.9	15,743	6.4	111	4.8	26,921	11.0
\$300	220	9.5	66,000	27.0	107	4.6	32,100	13.1	327	14.2	98,100	40.1
Total	782	33.9%	\$123,248	50.3%	1,526	66.1%	\$121,610	49.7%	2,308	100.0%	\$244,858	100.0%

Only a very small proportion of beneficiaries under the Minnesota College Savings Plan receive matching grants through the program in any given year. During calendar year 2006, contributions to the Minnesota College Savings Plan were made for over 32,000 beneficiaries and as shown in Table 3; matching grants were made for 2,308 individuals or about 7 percent of all beneficiaries for whom contributions were made. The amount paid for grants has consistently been lower than the amount appropriated by the legislature for the program. For example, in fiscal year 2006 an appropriation of over \$1 million was available, but less than \$300,000 in grants was paid.⁴⁷ In response, the 2007 Legislature increased the maximum grant amount from \$300 to \$400 and increased the grant rate in the upper income tier from 5 percent to 10 percent.

There are several possible explanations for the small number of grants made and the low take-up of grants:

- Most families who contribute to 529 plans likely have incomes that are too high to qualify (i.e., they are above \$80,000). As noted in the discussion of national participation, most participants in 529 plans have family incomes over \$100,000. Undoubtedly, these are also the families that make the largest contributions to the plan.
- Some of the accounts may be maintained for nonresident beneficiaries who do not qualify for matching grants. According to the MOHE, 18 percent of account owners were not Minnesota residents. It is unclear how many beneficiaries are nonresidents or whether there is a strong relationship between the number of nonresident account

⁴⁷ Minnesota Office of Higher Education, *Report on State Financial Aid Fund Balances for Fiscal Year 2006 Program Spending* (September 18, 2006): 14.

owners and nonresident beneficiaries. Some of the nonresident account holders, such as grandparents or other relatives, likely are maintaining the accounts on behalf of resident beneficiaries. But others may be out-of-state investors attracted to the Minnesota plan or former residents who have moved out-of-state, but who have maintained their Minnesota plan accounts.⁴⁸

- Account owners who make small contributions (for example, less than \$500) may conclude that applying for a grant of \$50 or less is not worth the time required.
- Some qualifying beneficiaries may be unaware of the availability of the matching grant program or for other reasons fail to apply. The MOHE and TIAA-CREF publicize the availability of the grant program and annually mail applications to all account owners. However, it is still likely that some participants do not read the materials sent by the plan and, as a result, are unaware that they may qualify for a matching grant.

State Incentives to Use 529 Plans—Deductions and Matching Grants

Tax Deductions for Contributions

Many states offer state income tax deductions for contributions to 529 plans.

Most states follow federal law in their income tax treatment of 529 plans. That is, most states do not tax investment income, as it is earned by the 529 plan account, and exempt distributions, if they are used for qualifying education expenses.⁴⁹ In addition, to encourage residents to participate in their in-state 529 plans, 33 states allow state income tax deductions for contributions to their plans. Most of these deductions are subject to dollar limits, although in four states no explicit dollar limit applies. Two states, Indiana and Vermont, provide credits for contributions.

Most states limit deductions to contributions to the state's own plan, but a few also allow deductions for contributions to any state's 529 plan.

Initially, most of these deductions were limited to the state's own plan. This encouraged residents to invest in their own state's plan. This could help increase the in-state plan's assets,

⁴⁸ It seems unlikely that the Minnesota plan attracts many out-of-state account owners because of the plan features (investment options and so forth). The Michigan plan is essentially identical, has lower costs, and likely has higher visibility.

⁴⁹ In the first years after federal authorization of 529 plans, a few states provided preferential taxation of plan earnings and distributions only to their in-state plans. That is, they followed the federal rules only for their own plans. This resulted in discriminatory taxation of out-of-state plans when money was withdrawn to pay college costs. Under pressure from taxpayers and the financial service industry, most states have abandoned this approach, although some vestiges linger. Alabama and Mississippi appear to have exemptions for income earned by and distributions paid by their plans only. Wisconsin provides that certain nonqualifying distributions from out-of-state plans are taxed (following the federal treatment), but that similar distributions from the Wisconsin plans are not.

reducing administrative costs for all participants (or for residents only) or reducing the need for state subsidies of the plan's administration. There has been some concern that limiting deductions or credits to the state's own plan may discriminate against interstate commerce in violation of the Commerce Clause of the federal constitution. A lawsuit has been filed challenging the Illinois tax deduction.⁵⁰ However, the recent U.S. Supreme Court decision upholding such discrimination in the case of municipal bonds likely lays these concerns to rest.⁵¹ A decision pending in the 2007 term of the U.S. Supreme Court on state taxation of municipal bond interest may help resolve this legal issue. Four states—Arizona, Kansas, Maine, and Pennsylvania—have expanded or allowed deductions for contributions made to any state plan. The Investment Company Institute, the trade association for mutual funds, has lobbied both Congress and state legislatures to make state income tax deductions available for contributions to all state 529 plans. The expansion of deductions to all state plans may be explained by this lobbying, Commerce Clause concerns, or a goal of providing their residents with greater investment choices.⁵²

Indiana and Vermont offer tax credits, rather than deductions, for contributions to their plans. These credits have higher rates (20 percent for Indiana and 10 percent for Vermont) than the typical state income tax rates and so are more valuable for a qualifying contribution than most deductions. Unlike deductions whose benefits vary depending upon the contributor's tax rate, the credits provide an equal benefit for the same sized contribution. The credits are not refundable, so contributors without tax liability (e.g., those with low incomes or nonresidents) do not benefit.

Table 4 summarizes the parameters of the state income tax deductions and credits for contributions to 529 plans. States frequently change these rules. The far right column ("Max annual gross state tax benefit") shows the state tax benefit of making a deductible contribution equal to the annual gift tax exclusion for a married joint taxpayer (\$24,000 in 2008) in the top state tax bracket. This amount is a "gross" benefit because it does not account for any federal tax offset from a reduction in the federal itemized deduction for state income taxes that the state deduction causes. This federal tax offset is discussed more fully in the last section of the information brief (page 24). For many taxpayers, this effect will reduce the actual benefit by 15 percent to 35 percent (depending upon their federal tax bracket).

⁵⁰ Investors in out-of-state 529 plans filed this class action lawsuit, challenging the limitation of the Illinois income tax deduction to contributions made to the in-state plan. *Ahmad v. Illinois Dept. of Revenue* (Ill. Cir. Ct., filed May 15, 2007); *Bright Start College Savings – Direct Sold Plan Program Disclosure Statement and Participation Agreement* 20 (July 1, 2007).

⁵¹ *Dept. of Revenue of Kentucky v. Davis*, 128 S.Ct. 1801 (2008). The case essentially allows tax discrimination in favor of in-state governmental enterprises. The only possible exception appears to be if the tax deductions or credits are viewed as favorable treatment for the financial institutions that carry out the investment and administration of the 529 plans, rather than the state plans or programs themselves.

⁵² A quotation from the director of the Kansas plan in a newspaper story suggests that this was the rationale for the Kansas expansion to all state plans. Sandra Block, "Education in state taxes can help before joining a 529 plan," *USA Today* (August 16, 2007) available at <http://www.usatoday.com/printedition/money/20070717/ym17.art.htm> (last accessed October 11, 2007).

Table 4
State Tax Benefits for 529 Plan Contributions
Tax Year 2008

State	529 deduction or credit	Top state tax rate	Max annual gross state tax benefit
Alabama	\$5,000 per contributor	5.0%	\$250
Arizona	\$750 single/\$1,500 married joint (any state plan)	4.54	68
Arkansas	\$5,000 per parent (\$10,000 married joint)	7.0	700
Colorado	Full amount of contribution	4.63	1,111
Connecticut	\$5,000 per parent (\$10,000 married joint)	5.0	500
District of Columbia	\$3,000 single/\$6,000 married joint	8.8	510
Georgia	\$2,000 per beneficiary	6.0	120
Idaho	\$4,000 single/\$8,000 married joint	7.8	624
Illinois	\$10,000 single/\$20,000 married joint	3.0	600
Indiana	20% tax credit up to \$1,000	N.A.	1,000
Iowa	\$2,685 per beneficiary	8.98	482
Kansas	\$3,000 single/\$6,000 joint per beneficiary (any state plan)	6.45	387
Louisiana	\$2,400 per beneficiary (\$4,800 for married joint and double the amount contributed may be deducted for incomes under \$30,000 or if beneficiary qualifies for free school lunch program)	6.0	144
Maine	\$250 per beneficiary (any state plan), if adjusted gross income is \$200,000 or less (\$100,000 for single or married separate)	N.A.	21
Maryland	\$2,500 per beneficiary	5.5	138
Michigan	\$5,000 single/\$10,000 married joint	4.35	435
Mississippi	\$10,000 single/\$20,000 married joint	5.0	1,000
Missouri	\$8,000 single/\$16,000 married joint	6.0	960
Montana	\$3,000 single/\$6,000 married joint	6.9	414
Nebraska	\$5,000 (\$2,500 married separate)	6.84	342
New Mexico	Full amount of contribution	5.3	1,272
New York	\$5,000 single/\$10,000 married joint	6.85	685
North Carolina	\$2,500 single/\$5,000 married joint	7.75	388
North Dakota	\$5,000 single/\$10,000 married joint	5.54	554
Ohio	\$2,000 per beneficiary per contributor or married couple	6.24	124
Oklahoma	\$10,000 per beneficiary per contributor	5.5	550
Oregon	\$4,000 per year/\$2,000 married separate	9.0	360
Pennsylvania	\$12,000 per contributor per child (any state plan)	3.07	737
Rhode Island	\$500 single/\$1,000 married joint	8.75	88

Table 4
State Tax Benefits for 529 Plan Contributions
Tax Year 2008

State	529 deduction or credit	Top state tax rate	Max annual gross state tax benefit
South Carolina	Full amount of contribution	7.0	1,680
Utah	Either a deduction (\$1,650 single/\$3,300 married joint) or tax credit (\$82.50 single/\$165 married joint)	5.0	165
Vermont	10% tax credit up to \$250 per taxpayer per beneficiary	N.A.	500
Virginia	\$2,000 per account per year (no limit for contributors age 70 and older)	5.75	115
West Virginia	Full amount of contribution	6.5	1,560
Wisconsin	\$3,000 per dependent beneficiary, self, or grandchild	6.75	203

Sources:
529 deductions: <http://www.finaid.org/savings/state529deductions.phtml> (supplemented for recent changes with information from *State Tax Notes* and savingforcollege.com);
Top tax rate: Federation of Tax Administrators for top tax rates for tax year 2008 (as of January 1, 2008) at http://www.taxadmin.org/fta/rate/ind_inc.html;
Maximum annual gross state tax benefit: Calculated by multiplying top tax rate by maximum deduction for married joint filers for one beneficiary; for states allowing unlimited deductions, \$24,000 contribution assumed (the maximum annual federal gift tax exclusion for a married couple); this calculation is a gross amount because it ignores the federal income tax offset from potential loss of the itemized deduction for state income taxes paid.

Matching Grant Programs

Eight states, including Minnesota, currently have programs to match a portion of 529 plan contributions

A few states, like Minnesota, offer matching grant programs or other state benefits funded by direct spending. Unlike Minnesota, all of these states also allow state income tax deductions for 529 plan contributions. The matching grant programs, in most cases, are targeted to lower income families, while the state income tax deductions benefit middle and upper income families. The total benefits of these matching grant programs are frequently very modest because few participants qualify for the programs as a result of income or other limits. Colorado, for example, reports on its website that it paid out only \$22,000 in matching grants in 2006.⁵³ Louisiana's matching grant program, by contrast, is more generous in many or most situations than its tax deduction.

These matching grant programs have some common features:

⁵³ Annual Highlights CollegeInvest (through December 31, 2006), available at <http://www.collegeinvest.org/PDF/SVPAnnual%20Highlights2006FINAL.pdf> (last accessed November 26, 2007).

- The match is put into a separate account for the beneficiary, but remains property of the state until distributed for qualifying higher education purposes. Although Minnesota does not do so, most states require distributions to be transferred directly to a higher education institution. Any entitlement to moneys not used for qualifying education costs eventually forfeits back to the state.
- Most states invest the money in a “stable value” or “fixed return” investment option, not the investment option that the account owner selected for direct contributions. (North Dakota is an exception to this.)
- All states limit qualification for the programs to residents. Usually this applies to both the beneficiary and the beneficiary’s parents or guardian.
- Most states restrict match programs to relatively low-income participants (particularly compared with most participants in 529 plans). Louisiana is the only state with no maximum income limit for matching grants.

Table 5 summarizes some of the key features of the state matching grant programs.

Table 5
State 529 Plan Matching Grant Programs

State	Match %	Maximum match	Maximum income	Year limit	Beneficiary age limit	Funding source
Arkansas	200% - 100%, based on income	\$500	\$60,000	5	18 for 1 st grant, 23 for additional beneficiaries	Program money
Colorado	100%	\$500	200% of federal poverty level	5	13	Program money [#]
Louisiana	14% - 2%, based on income and relationship	None	None	None	None	Appropriation
Maine	50%*	\$200	\$75,000**	None	None	Program money [#]
Michigan	33%	\$200	\$80,000	1	6	Appropriation
Minnesota	15% - 10%, based on income	\$400	\$80,000	None	None	Appropriation
North Dakota	100%	\$300	\$20,000 \$40,000 (married joint)	1	None	Bank of North Dakota
Rhode Island	200% - 100%, based on income	\$1,000 or \$500, based on income	State median income	5	11	Plan fees

Notes: Beneficiary age limit generally refers to the maximum age of the beneficiary when the account was open and/or initial contribution was made.

* Maine provides a \$200 match in the initial year for any contribution over \$50.

** Indexed for inflation

The extent to which these moneys derive from fees or other internal program revenues versus legislative appropriations is unclear.

Sources: savingsforcollege.com and websites of individual state plans.

Two states have pilot matching grant programs, and three others provide other benefits for 529 plan participants.

In addition to the states listed in Table 5, two states (Kansas and Utah) operate pilot matching grant programs. These programs are limited in time and/or number of participants.⁵⁴ Three states (Alaska, Nebraska, and New Jersey) provide scholarships or similar benefits for beneficiaries under their 529 plan programs who attend in-state higher education institutions.

For qualifying individuals, Minnesota's matching grant provides a financial benefit equal to or greater than many state tax deductions.

The maximum benefit of the Minnesota matching grant program is \$400 per beneficiary per year. This compares favorably with the maximum benefit under many of the state tax deductions, as outlined in Table 4. Eighteen states with large or unlimited state deductions offer higher gross state tax benefits. But as discussed in the next section, the unfavorable federal tax treatment of state tax deductions further reduces these benefits compared with Minnesota's matching grants.

Comparing Tax Deductions with Matching Grants

Minnesota's 529 plan has offered a matching grant since it was first enacted and several bills have proposed adding a state income tax deduction.

When Minnesota adopted its 529 plan in 1997, Gov. Arne Carlson and the legislature choose to provide a matching grant incentive, rather than a state income tax deduction.⁵⁵ Since 1997, several legislative proposals have been made to add a state tax incentive (typically a tax deduction) to the Minnesota plan.⁵⁶ From the perspective of a 529 plan contributor, matching grants and tax deductions or credits are clear economic substitutes for one another; they are simply different ways of providing financial benefits to 529 plan participants—either as tax benefits or deposits to 529 accounts. Although most states have limited matching grants to low- and middle-income families and tax deductions are available to all families with state income tax liability, the two approaches could be designed to provide benefits that are about equal for families with state tax liability. The two programs simply deliver their financial benefits in different forms. However, these differences in form have policy consequences because federal law does not treat them equally, individuals may perceive them differently, and tax benefits vary based on the taxpayer's tax rate.

⁵⁴ Some basic information on these programs is available on the savingforcollege.com website.

⁵⁵ The governor's proposal in the 1996 legislative session was for a state income tax deduction to encourage saving for higher education unconnected to a 529 plan. See the discussion in note 36.

⁵⁶ During the 2007 legislative session, three separate proposals were introduced proposing state income tax deductions for contributions to 529 plans. See H.F. No. 1378 (Paulsen); H.F. No. 1541 (Thissen); and H.F. No. 2106 (Gottwalt). H.F. No. 1541 and 2106 both allowed a deduction for contributions only to the Minnesota plan, capped at \$10,000 for married joint filers (\$5,000 for all others). H.F. No. 2106 would have allowed an income tax deduction to any state 529 plan, capped at \$5,000 per beneficiary. None of the bills would have allowed rolled over contributions (e.g., from another state plan) to qualify for the deduction. The Department of Revenue estimated the fiscal year 2008 cost of the Minnesota-only deduction to be \$6.7 million and the deduction to any state's plan to be \$25.7 million.

Public policy advantages of a matching grant rather than an income tax deduction are that:

- The federal income tax favors grants over deductions;
- Grants provide an equal dollar benefit to recipients, while deductions provide a greater benefit to those in higher tax brackets; and
- Matching grant programs ensure that the state expenditure is used for higher education.

Federal income tax treatment favors grants over deductions.

Under the federal income tax, a state tax deduction is not as cost effective as a matching grant. For individuals who itemized deductions under the federal income tax, the federal government essentially taxes the benefit of the state tax deduction. Because a deduction of the amount contributed reduces the contributor's state income tax, it also reduces the taxpayer's federal itemized deduction for state income taxes. As a result, the contributor's federal income tax rises.⁵⁷ This can diminish the value of the incentive provided by the deduction by 10 percent to 35 percent, depending upon the taxpayer's federal tax bracket.⁵⁸ Since most contributors to 529 plans have above-average incomes and likely itemize deductions, this is a significant limitation. A portion of the state cost of the deduction (perhaps over 25 percent) actually increases federal income tax revenues, rather than encouraging contributions to 529 plan accounts. By contrast, the matching contribution likely does not constitute federal taxable income to the recipient or the contributor at any point.⁵⁹ As a result, the full state cost of the match helps the beneficiary without any dilution by federal taxes.

A matching grant program allows the legislature to vary its benefits based on income or other factors, while the value of a tax deduction depends upon the tax rate of the contributor, providing more benefit to higher income taxpayers.

A matching grant program could be designed to equally benefit all families that make the same contributions or to vary based on income or other characteristics of the beneficiary's family. The Minnesota matching grant program, as described above, provides proportionately larger benefits (relative to equal contributions) for lower income families and provides no benefits for families with incomes above \$80,000. This apparently reflects a policy judgment by the legislature that benefits should be inversely related to income (that is, that low-income people should get more help and that above some income level, no help is appropriate).

⁵⁷ This does not apply to taxpayers who do not itemize deductions or who are subject to the federal alternative minimum tax, which does not allow deduction of state income taxes.

⁵⁸ For example, the Fidelity Investments website contains an online calculator that calculates for investors (and investment advisors) the net financial benefits of state tax deductions and credits, given the user's inputs for contribution amounts, income, state of residence, and alternative 529 plans. This calculator automatically nets out the offsetting effects of the loss of the federal itemized deduction in determining the benefit to the investor. See http://www.archimedes.com/fmr/stdc_pro.phtml#results (last accessed October 12, 2007).

⁵⁹ There is no written IRS guidance explicitly confirming this. But most tax lawyers (and state plans with matching contributions) believe that matching contributions and their earnings, when distributed and used to pay for tuition and fees, would be treated as an exempt scholarship under section 117. To achieve this treatment, it is important that the moneys be used to pay for tuition and fees, rather than room and board, since section 117 requires scholarships to be used for tuition and fees.

By contrast, a tax deduction is more valuable to individuals in higher tax brackets than to lower income individuals in the bottom or middle tax brackets.⁶⁰ Moreover, a deduction provides no benefit to someone who doesn't have enough income to pay tax or to an out-of-state relative (e.g., a grandparent) who is not subject to Minnesota income tax but makes contributions on behalf of a resident beneficiary. Thus, a state tax deduction would distribute its benefits in the opposite pattern of the present Minnesota matching grant: higher income taxpayers would receive more, lower income taxpayers less, and the lowest income taxpayers, nothing.

The structure of matching grant programs guarantees that the incentives are used for higher education.

Most state tax deductions provide no protection that the state tax benefits will actually be used to pay college costs.⁶¹ Contributors can decide whether to increase their contributions by the amount of the tax savings or to use them for other purposes. The matching contributions, by contrast, are held in a separate account and are released only to pay higher education costs.

Public policy advantages of a deduction over matching grant program are that:

- Tax deductions have smaller administrative costs than matching grant programs;
- Participation may be higher with a tax incentive than with a matching grant program; and
- Tax incentives are better designed to encourage participation in any state's 529 plans.

Ease of administration is a potential benefit of a state tax deduction or credit for both the state and participants.

Matching grant programs require administering a separate program. From the state's perspective, this requires preparing and distributing application forms, processing the applications, determining whether applicants are eligible, maintaining and investing the match accounts, and making distributions (including verifying that they are used for appropriate higher education purposes). By contrast, a tax deduction or credit can use the existing infrastructure of the income tax processing and compliance systems to minimize state administrative costs. This would require adding a line to the tax forms and a description of the deduction's parameters in the instruction booklet. If the Department of Revenue believes compliance is a problem, it typically would perform some computer matching of contribution and deduction records to verify compliance. The costs should be lower than operating a separate matching grant program.

⁶⁰ The state tax reduction for a deduction equals the taxpayer's marginal rate (i.e., the tax rate applying to the last dollar of income) multiplied by the deduction. For example, a taxpayer in Minnesota's top bracket (7.85 percent rate) making a \$1,000 contribution would realize a state tax reduction of \$78.50 ($\$1,000 \times 7.85\%$). By contrast, a \$1,000 contribution by a bottom bracket taxpayer (5.35 percent rate) would result in state tax savings of \$53.50 ($\$1,000 \times 5.35\%$). If the taxpayer itemizes deductions for federal income tax purposes, the federal offset (detailed in the previous bullet in the text) must be accounted for. This will tend to equalize the value of the deduction somewhat, disproportionately reducing its benefit to higher income families, especially relative to lower income families who do not itemize deductions.

⁶¹ For example, Wisconsin even appears to ensure that state tax does not apply certain distributions from its in-state 529 plans used for nonqualifying purposes, although federal tax applies. This is based on the description in the Wisconsin income tax instruction booklet for tax year 2006. *See Wisconsin income tax Form 1 Instructions*, 16 (refunds due to completion of program, scholarships, tuition waivers, and so forth exempt).

From a participant's perspective, compliance costs may be lower as well, since applying for and receiving the benefit of a tax deduction is unlikely to increase the cost or time required to fill out the state income tax forms by much. By contrast, filling out a separate form to claim a matching grant (depending upon how detailed or complicated it is) likely will require somewhat more time and effort.⁶²

Participation *may* be higher under a tax incentive.

As noted above, participation in Minnesota's matching grant program is low. This may simply be because few income-qualified people participate in 529 plans. A 2003 Investment Company Institute survey found that the median income of participants in 529 plans was \$100,000, well above Minnesota's \$80,000 income limit. However, it is also possible that some participants are not aware of the program or its potential application to them, even though TIAA-CREF notifies all participants of the program and provides application forms each year. The program is publicized on the plan's website, but otherwise does not get a great deal of attention. Much of the national publicity regarding 529 plans focuses on the widespread availability of state tax benefits, since they are so common in other states. Media stories (as well as the SEC, NASDAQ, and other guidelines) encourage investors to consider state tax benefits before selecting plans. There is little or no similar attention given to matching grant programs. As a result, potential participants may simply be less aware of matching grant programs than tax incentives. Moreover, tax preparers likely also publicize tax incentives to their clients. The public probably more readily understands the benefits of a tax deduction, although the use of employer matches to 401(k) plans should make matching contributions a well-known concept as well.

The financial institutions that manage and market the plans believe that state tax deductions increase participation and are willing to reduce their prices based on this belief.⁶³ However, there has been little empirical research on the effect of tax deductions or matching grants on participation in 529 plans. One study examined the effects of the expanded disclosures to potential investors of a variety of factors, including the availability of state income tax benefits, and found that the state tax benefits did not appear to attract greater investment flows to the plans.⁶⁴ A study of the Maine matching grant program, based on a survey of participants and

⁶² When the Minnesota College Saving Program was enacted and initially implemented, the state considered providing automatic matching grants by accessing electronic tax return data to determine eligibility (with pre-authorization from the beneficiary's parents). This could have reduced administrative costs, but was determined to be not feasible. An automatic match program with the associated reductions in costs and increased in participation would be possible if the income limits on the match program were eliminated. This is what was originally proposed by Gov. Carlson, but was rejected by the legislature.

⁶³ This point is based on communications from MOHE staff. However, no state has offered a generous matching grant program yielding financial benefits comparable to many of the tax deductions (e.g., providing significant grants to higher income contributors), so we don't know how the industry would regard such an incentive. Thus, this doesn't necessarily provide information about the comparative participation effects of tax deductions, as compared with matching grants.

⁶⁴ Raquel Meyer Alexander and LeAnn Luna, "An Analysis of Individual Investor's Response to New 529 College Savings Plans' Disclosures," *Proceedings of the 99th Annual Conference of the National Tax Association* 378 – 84 (November 2006). The study found a strong correlation between positive investment flows into plans and investment returns. Plans with higher investment returns attracted more new investments. But the authors state "Surprisingly, we do not find that state tax benefits affect investment returns patterns in the pre- or post-disclosure subsamples." *Id.* at 383.

their participation rates, suggests the matching grant increased the likelihood of participants making larger contributions.⁶⁵ Both of these studies are preliminary or based on limited data and do not provide much basis for concluding whether tax incentives or matching grants are effective in encouraging participation in 529 plans. Moreover, they do not compare the relative effectiveness of the two types of financial incentives.

There is extensive literature on incentives for participation in retirement savings plans, such as 401(k) plans and individual retirement accounts. Studies of employer matching grants under 401(k) programs have found that they have small effects on the level of participation in the programs.⁶⁶ None of these studies, however, compare the effect of a match with a tax deduction, since they analyze 401(k) participation, which always includes a tax deduction/deferral. One study that actually did this—using a survey or experiment with undergraduate and graduate business students—found that the form of the incentive, whether tax deferral, tax exemption of investment income, or matching grant/refundable credit, did not affect the tendency to choose the investment.⁶⁷ This result is based on the experiment, but when explicitly asked, participants indicated a preference for the tax exemption of investment income (similar to a Roth IRA or 529 plan tax incentive). Another study compared the result of a large randomized field experiment with matching contributions for IRA contributions with participation in the federal “savers credit” for low-income taxpayers. This study found that the match was more effective than the credit. That may have resulted from the simplicity of the match and way it was presented (“framing effects”), rather than differences between matches and tax credits.⁶⁸ It is not at all clear that any of these results provide insights into the 529 plan matching grant programs, since the context is sufficiently different and presentation (“framing” and “cues”) appears to be important. All this suggests that we really do not have any solid basis for concluding whether or

⁶⁵ Margaret Clancy, Chang-Keun Han, Lisa Reyes Mason, and Michael Sherraden, “Inclusion in College Savings Plans: Program Features and Savings,” *Proceedings of the 99th Annual Conference of the National Tax Association* 385-93 (November 2006). The study found a stronger relationship with participation in the automatic funding service feature of the Maine program (an automatic deposit program) and the amount of contributions. This is consistent with the literature on 401(k) plan participation, described later in the text of the information brief. It suggests, perhaps, a policy alternative of tailoring a matching grant to encourage enrollment or continued enrollment in an automatic deposit program for a 529 plan.

⁶⁶ See, e.g., Gary V. Engelhardt and Anil Kumar, “Employer Matching and 401(k) Saving: Evidence from the Health and Retirement Study,” DNB Working Paper No. 79 (December 2005), for a summary of the literature. Engelhardt and Kumar found an elasticity of 0.06, suggesting that doubling the employer match would increase contributions by 6 percent. See also John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian, “The Impact of Employer Matching on Savings Plan Participation under Automatic Enrollment,” National Bureau of Economic Research Working Paper (August 7, 2007) which found dropping an employer match in an automatic enrollment 401(k) plan would reduce participation by 5 to 11 percentage points. (Automatic enrollment requires an employee to opt out of participating in a 401(k). Studies generally find that this is a very effective mechanism for increasing participation, as compared with employer matches.)

⁶⁷ Julia Brennan, David S. Hulse, and Cynthia Vines, “The Effect of the Form of the Tax Incentives on Individuals’ Savings Decisions,” University of Massachusetts College of Management Working Paper 1006 (May 2005).

⁶⁸ Esther Duflo, William Gale, Jeffrey Liebman, Peter Orszag, and Emmanuel Saez, “Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block,” Working Paper 11680 National Bureau of Economic Research (September 2005). They found that the match increased the take-up rate for IRA contributions by 4 to 7 times and increased the amount of contributions. By contrast, the effects of the savers credit were “at best very modest” (p. 29).

not a tax deduction would be more effective at increasing participation than a matching grant. Thus, we are left with the speculation and surmise contained in the previous paragraphs.⁶⁹

Tax incentives are better designed to encourage participation in other states' 529 plans.

If the legislature wishes to encourage participation in any state's 529 plan, not just Minnesota's, a tax credit or deduction provides a better approach. It would not be administratively feasible to make matching contributions to other state plans that do not have in place the necessary infrastructure for maintaining separate match accounts.⁷⁰ Alternatively, it would be costly administratively to maintain matching contribution accounts in the Minnesota plan for participants in other state plans. Tracking the maintenance and use of these other state accounts would likely not be administratively possible.

Most of the proposals for Minnesota tax deductions and the tax deductions in other states are not financially equivalent to the Minnesota matching grant program; they're more generous in important respects.

The tax deductions proposed typically are more generous than the matching grants in two respects: (1) Most importantly, the deductions are available to high-income participants. From the perspective of a participant with income over \$80,000, the Minnesota matching grant is zero and provides no incentive to participate.⁷¹ (2) The financial benefits of tax deductions—i.e., the net state tax savings—are available immediately to be used for any purpose. (By contrast, matching grants are restricted to being used for college costs and often aren't available for at least three years.) The law does not require the tax savings to go into the account or to be used for college (nor could it practically do so). Providing immediate access to the money and allowing it to be used for any purpose may be perceived as an advantage to contributors. Both of these financial advantages of tax deductions may encourage participation, as compared with a matching grant. However, it is not clear that policymakers would view these characteristics of tax deductions to be desirable or advantageous, since they do not result in additional savings for higher education equal to the value of the deduction.

⁶⁹ Note that this discussion is directed at participation in the 529 plan; it is not intended to speak to whether the state tax deductions or matching grants actually result in new saving for college. Much of the participation in 529 plans simply involves families transferring existing assets into the accounts or using them for savings that would have otherwise occurred. This issue is briefly discussed at the end of the information brief.

⁷⁰ Only Minnesota and seven to nine other states have either general matching programs or pilot programs. Federal tax law does not appear to contemplate a state simply contributing an amount directly to the participant's account in the out-of-state plan. Section 529 authorizes a "person" to contribute to a 529 plan account. I.R.C. § 529(b)(1)(A)(2). But the person does not appear to include a governmental unit. The code defines "person" as "an individual, a trust, estate, partnership, association, company or corporation." I.R.C. § 7701(a)(1). Moreover, if the state were to contribute directly to a participant's account in its own plan, it would appear to violate the prohibition on a contributor controlling investment direction of the account, since the state (by definition) must control the investment direction of its own plan.

⁷¹ None of the proposals for Minnesota tax deductions have contained income limits. By contrast, the 1997 legislature rejected Gov. Carlson's proposal to provide matching grants without regard to income and limited them to \$80,000. This income limit has not been adjusted since 1997. If it were adjusted for inflation, the income limit would equal about \$107,000 in 2008 dollars, rather than \$80,000.

Summary: On balance, matching grant programs probably offer more policy benefits than state tax deductions do. Their principal advantage is favorable federal tax treatment, which allows a state to provide higher income participants a 10 percent to 35 percent larger benefit (at the same cost to the state) because the matching grant or contribution is not subject to federal tax.⁷² Moreover, a matching grant program ensures the benefits are used for higher education. However, a state tax deduction does have the advantage of lower administrative costs, since most of its fixed costs are already covered by the state income tax infrastructure. A deduction also is better designed to encourage participation in any state's 529 plan. Tax incentives may also be more successful in encouraging participation in 529 plans, although this is far from clear.

So far all states, other than Louisiana, have not provided matching contributions or grants to higher income participants in 529 plans, although virtually all states with tax deductions make their benefits available to these families. Other than Minnesota, all of these states also have tax deductions. These states may simply view the matching grants as a complement to their tax deductions—that is, to help families who would get little or no benefit from a tax deduction because they have no tax liability or are subject to a low tax rate. This view ignores the reality that high-income households would benefit most from the favorable federal tax treatment of matching contributions. It may also be based on a general antipathy toward providing direct state assistance to high-income families, but an acceptance of doing so through the tax code. If the true purpose of proponents of tax deductions is to extend benefits to higher income families, this could be achieved by raising or eliminating the income limits under the matching grant program. This approach would be more cost-effective; larger net benefits could be provided to participants at the same cost to the state.

529 Plan Incentives and Savings

It is unclear whether 529 plan incentives actually stimulate savings.

Some legislators support 529 plan incentives, such as tax deductions or matching grants, with a goal of encouraging families to save to pay for college. Since their inception, 529 plans have attracted a large and growing pool of assets (about \$130 billion by the end of 2007). It would be easy to leap to the conclusion that 529 plans, with their federal and various state tax and other benefits, have successfully stimulated savings for higher education. However, this is far from clear. Policymakers should take care before assuming that either existing 529 plan benefits or the addition of more incentives, such as a state contribution deduction or more generous matching grants, will actually result in *new* saving—that is, that 529 plans cause families to save money that they otherwise would have consumed by reducing their spending on clothing, entertainment, housing, food, vacations, and so forth.

There are a number of reasons to be skeptical about the likelihood that 529 plans actually lead to new savings. Some of these include the following:

- **A large portion of 529 plan assets likely represent pre-existing assets that the account owners simply transferred into 529 accounts to take advantage of the**

⁷² Minnesota and most states have not chosen to make their matching grants available to higher income families, even though tax deductions are virtually always provided without income limits.

tax incentives. Some families already have substantial assets set aside to pay for college for their children or grandchildren. 529 plans allow these individuals to transfer these moneys into tax-preferred accounts, enjoying the tax benefits without actually changing their savings behavior. If they intend to use these moneys for college, there is little reason not to use 529 accounts. The tax penalties for using the money for noncollege purposes are modest. The main disadvantages are the limitations on investment options and higher fees than in a standard taxable account. Thus, one would expect most families to transfer pre-existing college savings into 529 plans.

- **Many families would save for college regardless of whether or not tax incentives are available to them.** Again, the tax benefits of 529 plans likely will cause many of these families to use the accounts. But this is also not new savings.
- **Some families could directly or indirectly finance their contributions to 529 plans with debt, such as mortgage or home equity debt.** Families could substitute other forms of savings, such as reducing the amount of their home equity, to fund 529 accounts. In all of these cases, 529 plan assets do not represent new savings.
- **We are aware of no empirical studies of the effectiveness of 529 plan incentives in stimulating new savings.** Public finance economists have done extensive empirical analysis of the effects of tax incentives for retirement savings (such as individual retirement accounts and 401(k) plans), but have not reached a consensus as to whether these incentives stimulate new savings. One group of studies found these incentives effectively stimulate substantial increases in savings.⁷³ Another group of studies finds that retirement savings incentives lead to little new savings and, in the short run, could reduce savings after taking into the account the reduced tax revenues (and increased government deficits).⁷⁴ Some think that, on balance, this literature shows that retirement savings incentives have modestly increased savings.⁷⁵ However, it is not clear if these analyses of retirement savings incentives also apply to the much shorter-term savings for college costs using 529 plans. The conventional recommendation of financial planners is to fund retirement savings first, rather than college savings.⁷⁶ Retirement incentives generally provide a larger tax benefit, since the tax exemption period is longer. Moreover, Congress in 2001 and 2006 substantially increased the limits on the retirement plan benefits, providing larger opportunities for tax-preferred savings through retirement accounts.

⁷³ See, e.g., James M. Poterba, Steven F. Venti, and David Wise, "How Retirement Savings Programs Increase Savings," *Journal of Economic Perspectives*, 10, no. 4 (1996): 91-112.

⁷⁴ See, e.g., Eric M. Engen, William G. Gale, and John Karl Scholz, "The Illusory Effects of Savings Incentives on Saving," *Journal of Economic Perspectives*, 10, no. 4 (1996): 113-38.

⁷⁵ R. Glenn Hubbard and Jonathon S. Skinner, "Assessing the Effectiveness of Saving Incentives," *Journal of Economic Perspectives*, 10, no. 4 (1996): 73-90.

⁷⁶ Nancy Opiela, "Tough Choices: Helping Parents Save for College and Retirement," *Journal of Financial Planning* (June 2001) ("Universally, in theory anyway, planners have four words of advice for clients in this situation: 'Put your retirement first'."), available at http://www.fpanet.org/journal/articles/2001_Issues/jfp0601-art2.cfm (last accessed on January 10, 2008).

In conclusion, it is very difficult to determine how savings behavior is affected by increasing the return to savings, which is effectively what 529 plan incentives do. Empirical evidence is lacking. Furthermore, the difficulty of inducing employees to respond to financial incentives for 401(k) retirement savings (as opposed to default or automatic enrollment in 401(k) plans) suggests caution in concluding that existing or new 529 plan incentives actually increase or will increase savings for college.⁷⁷

For more information about income taxes, visit the income taxes area of our web site, www.house.mn/hrd/issinfo/tx_inc.htm.

⁷⁷ See, e.g., Brigitte Madrian and Dennis F. Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics*, 116 (2001): 1149-87 (default enrollment in 401(k) plans more effective than employer matches); Richard Thaler and Shlomo Benartzi, "Save More Tomorrow: Using Behavioral Economics to Increase Employee Savings," *Journal of Political Economy*, 112 (2004): 164-187.

Appendix: The Minnesota College Savings Plan

The 1997 Minnesota Legislature authorized establishment of Minnesota's 529 plan, the Minnesota College Savings Plan.⁷⁸ The state contracted with TIAA-CREF, a large financial services firm that provides pension, retirement, and mutual fund products, to provide administration, operations, and investment management for the plan. The plan began operations in the summer of 2001. The rest of the Appendix describes some of the key features of the Minnesota College Savings Plan. More detailed information can be obtained on the Minnesota Office of Higher Education's website or from the *Plan Disclosure Booklet*, also available on the website.⁷⁹

Investment Options

Account holders in the Minnesota College Savings Plan have six investment options.

Under the Minnesota College Savings Plan, account holders can select among six investment options (as of November 2007) for their accounts. Multiple accounts can be opened for one beneficiary to divide the total amount contributed among these options:

- **Age-based allocation** invests in a mix of TIAA-CREF mutual funds that varies based on the age of the beneficiary. The funds are allocated to increasing proportions of fixed income funds, as the beneficiary ages and the likely time for taking distributions to pay higher education costs gets closer.
- **Equity option** invests in a mix of TIAA-CREF mutual funds that hold various types of equity securities—e.g., securities intended to track indexes in large and small capitalization stocks and a broad market index, real estate securities, and international stocks.
- **Balanced option** allocates investments between a broad mixture of equity securities (60 percent) and fixed income investments (40 percent), such as bonds.
- **Fixed income option** allocates all of its investments to bonds and other fixed income investments, including inflation-adjusted securities.
- **Money market option** invests in very short-term investments, such as Treasury bills, commercial paper, and bank certificates of deposit.
- **Guaranteed option** invests in an insurance contract that guarantees preservation of principal, a 3-percent interest rate, and additional interest payments that vary

⁷⁸ 1997 Minn. Laws, ch. 183, art. 2, §§ 12–16, codified at Minn. Stat., ch. 136G. In the previous session, the governor instead proposed a state income tax deduction to encourage saving for college by families who received little direct state financial assistance for college. Federal authorization of 529 plans created an opportunity to leverage federal tax incentives that would not have been available under the state only tax deduction proposed in the 1996 legislative session. The 1997 proposal opted for combining the 529 plan with a state matching grant program, rather than a tax deduction, for many of the reasons stated in the last section of this information brief that compares matching grants and state tax deductions.

⁷⁹ The address of the website is: <http://www.mnsaves.org/>; the plan disclosure booklet is available at: http://www.mnsaves.org/pdf/mn05_disclose.pdf.

annually. Accounts may not be transferred from this option to the money market option, even if the beneficiary is changed.

Fees

Administrative and management fees for all of the accounts are 0.65 percent of assets.

Fees, the cost of the administering the program and investing the funds, are important factors in determining the total return of a 529 plan account. These fees pay for the cost of operating the program, including everything from administrative functions (e.g., legal compliance, record keeping, marketing, making distributions, mailing account statements, and so forth) to investment management (e.g., paying investment managers, brokerage costs, and so forth). Because these fees directly reduce investment returns, keeping them as low as possible is very important to participants in the program. To the extent these fees are higher than on comparable investments (e.g., on other states' 529 plans, ESAs, or regular taxable investments), they reduce the attractiveness of the state's plan. Additional fees associated with 529 plans (i.e., over and above the comparable underlying investments) absorb or reduce some of the tax advantage of 529 plans.

Minnesota has set the fees for all of its 529 plan account options at 0.65 percent of the assets in the account.⁸⁰ It is difficult to compare 529 plan fees for different state plans because these fees are structured in a variety of different ways by other states. For example, many states impose flat account maintenance fees in addition to fees based on a percentage of assets. Also, unlike the Minnesota fee structure, fees typically vary based on the type of investment option selected for the account. Some states provide lower fees to their own residents. However, based on fee comparisons prepared by some investment services, Minnesota's fees appear to be about average or slightly above average.⁸¹ Michigan's plan, which is structured similarly to Minnesota's and is also operated by TIAA-CREF, has a 0.45-percent fee or is a 0.20 percentage point lower than

⁸⁰ This fee has two components: the expenses of the underlying mutual funds (primarily investment management) and plan manager costs (primarily administrative type expenses) for each account option. The costs of the underlying mutual funds vary because the costs of some types of investment management (e.g., international investments) are higher than others (e.g., money market investments). However, in designing its fee structure Minnesota has chosen to vary the plan manager fees to offset variations in the costs of the underlying mutual funds. This keeps the fee structure very simple and understandable, but it results in small cross subsidies of owners of different types of accounts. Investors in higher cost funds (e.g., the 100-percent fixed income option is the highest Minnesota option) benefit at the expense of participants in lower cost funds (e.g., money market is the lowest). These effects are small, since the cost of the TIAA-CREF equity funds are low because they are mainly institutional index funds and the variation in other fund costs is relatively small.

⁸¹ This is based on Morningstar's comparisons, available at: <http://www.morningstar.com/529/529Table.html>. See Kerry O'Boyle, "Paying Too Much for Your 529 Plan College Savings Plan?" (May 10, 2007), available at http://news.morningstar.com/articlenet/article.aspx?id=193474&_qsba=y (lasted accessed October 5, 2007) for a discussion of Morningstar's comparisons and the effects of fees. For equity index funds, this article suggests a rule of thumb for investors of about 0.50 percent. Minnesota's equity investments are largely all index funds and the fee is 0.65 percent, modestly above the "rule of thumb." These results are consistent with the 529 Fee Study prepared by savingforcollege.org, available at http://www.savingforcollege.com/529_fee_study/ (last accessed on June 12, 2008).

Minnesota's.⁸² This fairly significant difference may be explained by the fact that Michigan's plan is three times larger (allowing fixed costs to be spread over more assets)⁸³ or that the state recently renegotiated its contract with TIAA-CREF.

The Minnesota College Savings Plan is exclusively a "direct-sold" plan. Individuals purchase investments (make contributions) directly to the plan. The program does not provide an option for financial planners or brokers to sell accounts to customers on a commission basis. A fair number of states offer these broker- or advisor-sold plans (often in combination with direct-sold plans). Conventional wisdom suggests that individuals should avoid these funds, if possible, since the commission or load will reduce how much of their money actually is invested and, thus, the potential return. For example, if the commission is 5 percent, only 95 percent of the contribution actually is invested and has the potential to grow. However, some individuals will not save or invest without encouragement or advice from a financial professional and many of these professionals rely primarily on commissions as their compensation (rather than charging fees unrelated to the sale of products). In a 2003 survey of participants in 529 plans, over half of them reported their primary channel for saving and investment was through advisor-sold investments.⁸⁴ Thus, offering an advisor-sold option may increase participation, but it could also result in more individuals (some of whom otherwise would have invested directly) gravitating to the higher cost and, all other things being equal, lower return advisor funds, with the net result that more of the amount contributed to accounts is "lost" in commissions or loads and less is available for college costs.

Matching Grant

State law provides matching grants for low and middle-income families.

In designing its plan, Minnesota opted for a matching grant, rather than a state tax deduction for contributions as provided by many other states. This section describes the basic features of the Minnesota matching grant program. The text of the information brief provides information on participation in the matching grant program.

Eligibility requirements. Eligibility for the match depends upon characteristics of the designated beneficiary and his or her family. To qualify, four conditions must be met:

- **Annual application.** The account owner must file an annual application for the match by May 1 of the year after the contribution is made.⁸⁵

⁸² See <http://quicktake.morningstar.com/529/overview.asp?PlanSymbol=5PUSA0000L> (last accessed October 5, 2007).

⁸³ Based on assets reported by Morningstar for August 31, 2007, the Michigan plan had assets of almost \$1.8 billion, while the Minnesota plan had assets of about \$600 million. <http://www.morningstar.com/529/529Table.html?pfsection=529&t1=1192117797> (last accessed October 11, 2007).

⁸⁴ Investment Company Institute, *Profile of Households Saving for College* 42 (Fall 2003). By contrast, only 18 percent reported primarily relying on direct market plans (buying without using a broker). These amounts are for all their savings and investments, not just the 529 plans. But they do provide an indication of the reliance on commission-compensated advisors in selecting investments.

⁸⁵ The authority to apply is not limited to the parents of the beneficiary, but can be done by any account owner (e.g., a grandparent). However, a beneficiary can only qualify for one match, regardless of how many accounts the

- **Minimum contribution.** At least \$200 must be contributed to the account during the calendar year.
- **Residency.** The beneficiary's parents are Minnesota residents or the beneficiary is a Minnesota resident if she or he is 25 or older.⁸⁶
- **Income limits.** The beneficiary's family income does not exceed \$80,000 for the year. This is the combined adjusted gross income of the beneficiary's parents.⁸⁷ If the beneficiary is 25 or older, the beneficiary's income is used. The program's income limits were enacted in the original law. They were not indexed for inflation and have not been adjusted since they were enacted in 1997. Had they been indexed for inflation, the \$80,000 limit would have increased to about \$103,000 for 2007.

Amount of the match. The maximum annual matching grant is \$400 per beneficiary (increased from \$300 by 2007 legislation).⁸⁸ Calculation of the amount depends upon the amount of family income and contributions to the Minnesota College Savings account during the year. The table shows the rates at the two income levels.

Minnesota Matching Grant Parameters			
Family Income	% of contributions matched	Maximum grant	Minimum contribution needed to receive maximum grant
0 - \$50,000	15%	\$400	\$2,667
\$50,000 - \$80,000	10%	\$400	\$4,000

Funding of matching grants. Matching grants are funded with a direct biennial appropriation. If the appropriation is insufficient to pay all of the matching grant entitlements based on applications received for the year, each matching grant is proportionately reduced so that all grants equal the available appropriation. So far, the available appropriations have always exceeded the matching grant entitlements.

Ownership, distribution, forfeiture, and investment of matching grants. Matching grants are credited to an account designated for the beneficiary, but the state retains ownership until the money is actually distributed to the beneficiary for higher education costs. To qualify for a distribution, the beneficiary must have had an account for a three-year period.⁸⁹ The plan (TIAA-

beneficiary is on. Moreover, the parents are likely to be the only ones that have access to key information required on the application, such as family income.

⁸⁶ If the parents are divorced, the parent claiming the beneficiary as a dependent for tax purposes must be a Minnesota resident.

⁸⁷ If the parents are divorced, the income of the parent claiming the beneficiary as a dependent for tax purposes is used. The beneficiary's own income does not count.

⁸⁸ 2007 Minn. Laws ch. 144, art. 2, § 43.

⁸⁹ This period includes any time the money was held in another QTP account, including under another state's 529 plan. This three-year requirement is intended to prevent deposits into and withdrawals from accounts (e.g., when the beneficiary is already in college) simply to qualify for the state match. This confirms the purpose of the match to encourage saving, not just provide a grant-in-aid for college costs.

CREF) invests this matching grant amounts without regard to the investment option selected by the account owner for the account that generated the match.⁹⁰ Distributions from a matching grant account may only be made for qualified higher education costs. Put another way, unlike a nonmatch 529 plan account, these amounts cannot be withdrawn and used for other purposes by paying taxes and the federal penalty on the amounts.

Matching grant amounts may be forfeited, in whole or part, if:

- The beneficiary is changed or the account is transferred to another state's 529 plan;
- The beneficiary dies;
- The beneficiary receives a scholarship or attends a military academy; or
- Amounts from the regular 529 plan account are withdrawn for other than qualifying higher education costs.

⁹⁰ The grant amounts are invested in the guarantee option described in the text above.