AN ANALYSIS OF INDIVIDUAL INVESTOR'S RESPONSE TO NEW 529 COLLEGE SAVINGS PLANS' DISCLOSURES*

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INTRODUCTION

STATE-SPONSORED SECTION (§) 529 COLLEGE Savings Plans (529 plans) have many tax and non-tax features to entice investors. The plans offer tax-free earnings, and withdrawals for qualified education expenses are also exempt from tax. In addition, 529 plans are particularly attractive to moderate- to high-income tax payers as the contribution limits are very high and participation phaseouts based upon income do not exist. However, consumers find 529 plans complex as each state offers different plan features that change frequently. The state-designed plans differ in distribution methods, plan managers, investments, tax benefits, and other plan attributes. While information exists that would enable individual investors to make knowledgeable decisions, only a few relatively specialized Web sites present this information.

Initial academic research on 529 plans found that 529 plan investment strategies are potentially suboptimal as investors frequently forgo available state income tax benefits by investing in out-of-state plans (Alexander and Luna (AL), 2005). Furthermore, many investors selecting an out-of-state plan chose high-fee funds sold primarily by commissioned sales representatives when comparable investments were available at much lower costs (AL, 2005). Subsequent to AL (2005), additional information on investment performance, fees, and state tax benefit information became more readily available. In this paper, we provide background on select tax and non-tax features of 529 plans and discuss recent improvements in disclosures. We then examine 529 plan investments as a function of taxes, returns, and distributions methods. Preliminary evidence suggests that historical return disclosures influence 529 investors' purchasing behavior while state tax disclosures do not.

BACKGROUND ON §529 PLANS

Section 529 college savings plans were enacted by Congress in 1996, a decade after Michigan established the first pre-paid tuition plan. Unlike pre-paid tuition plans, the savings plans are state-selected mutual fund investments that generally include various stock, bond, and cash selections and provide market returns. Many plans also offer age-based options that automatically adjust the investment mix as the beneficiary approaches college age. Originally, 529 plans were much like nondeductible IRAs; 529 plans had nondeductible contributions, tax-deferred earnings accumulation, and earnings taxed upon withdrawal. Investor interest in 529 plans exploded in 2001 when withdrawals used for qualified educational expenses became tax-free. Unlike most pre-paid tuition plans whose benefits were limited to in-state colleges and universities, 529 savings plan assets could be used at any qualified educational facility.

Because 529 plans have no income limitations, they are therefore available to high-wealth individuals. Furthermore, the contribution limits are high – ranging from a low of $224,465 in Louisiana to $341,000 in Florida. Although owners retain complete control over the accounts and can change or remove beneficiaries at any time, 529 plan contributions are considered completed gifts and are eligible for the annual gift tax exclusion. Donors can elect to treat an initial contribution as though it was made over a 5-year period. Thus, contributions of five times the annual exclusion (currently $12,000 per year or $60,000) are gift tax free in year one. However, additional taxable gifts during the next four years would be subject to the gift tax.

Although 529 plans offer mutual fund investments, 529 plans are municipal securities and are not subject to the same federal regulatory over-

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sight as the mutual funds themselves. Regulation and oversight fall to the states and the Municipal Securities Rulemaking Board (MSRB). States individually determine plan features that include distributors and distribution method (direct- or broker-sold), fees and expenses, investment options, and state tax treatment of contributions and distributions.

Currently, 48 states and the District of Columbia have a 529 plan with more than 8.7 million children enrolled in a plan. Figure 1 demonstrates the extraordinary growth of 529 plans from 1996-2005. According to Financial Research Corporation, 529 plan assets reached $82 billion by third quarter 2006, up 6 percent from midyear and 29 percent from third quarter 2005 (Paikert, 2006). The 2006 Pension Protection Act extends permanency to 529 plan tax preferences. Program managers predict continued growth as Congress eliminated investors' uncertainty about future tax treatment of withdrawals. Financial Research Corporation predicts assets to exceed $200 billion by the end of 2010 (Figure 2).

529 PLAN OVERSIGHT AND DISCLOSURES

Although established by federal law, 529 plans are governed by the issuing states and are, therefore, considered municipal securities. In a 2004 letter, the Securities and Exchange Commission (SEC) classified 529 plans as municipal securities governed by the MSRB. The NASD (formerly National Association of Securities Dealers) regulates 529 plan brokers only if those brokers sell other NASD regulated securities.

As municipal securities, 529 plans are not subject to the same regulations as mutual funds and other SEC regulated investments. Therefore, fees, historical performance, and other standard disclosures are not required and 529 brokers are not treated as securities dealers subject to NASD and SEC enforcement. In February 2006, MSRB and NASD formally pledged continued cooperation to harmonize their respective municipal securities and 529 plan rules.

In 2003, College Savings Plans Network (CSPN) initiated a disclosure project that addressed concerns that 529 plan investors were receiving incomplete information. The first CSPN disclosure initiative, Disclosure Principles Statement No. 1 (DP1) was approved by CSPN member-states on December 2, 2004. Among other items, DP1 recommends that fees, federal tax treatment, and state tax benefits be uniformly disclosed in offering materials.

Early in 2005, CSPN formed a Disclosure and Governance Committee charged with periodically reviewing the CSPN Disclosure Principles, coordinating SEC, MSRB, and NASD matters relating to qualified tuition program disclosures and advertising, and proposing additional governance procedures for qualified tuition programs. To promote 529 plan offering materials' uniformity and transparency, CSPN revised DP1 and adopted Disclosure Principles No. 2 (DP2) on July 26, 2005.

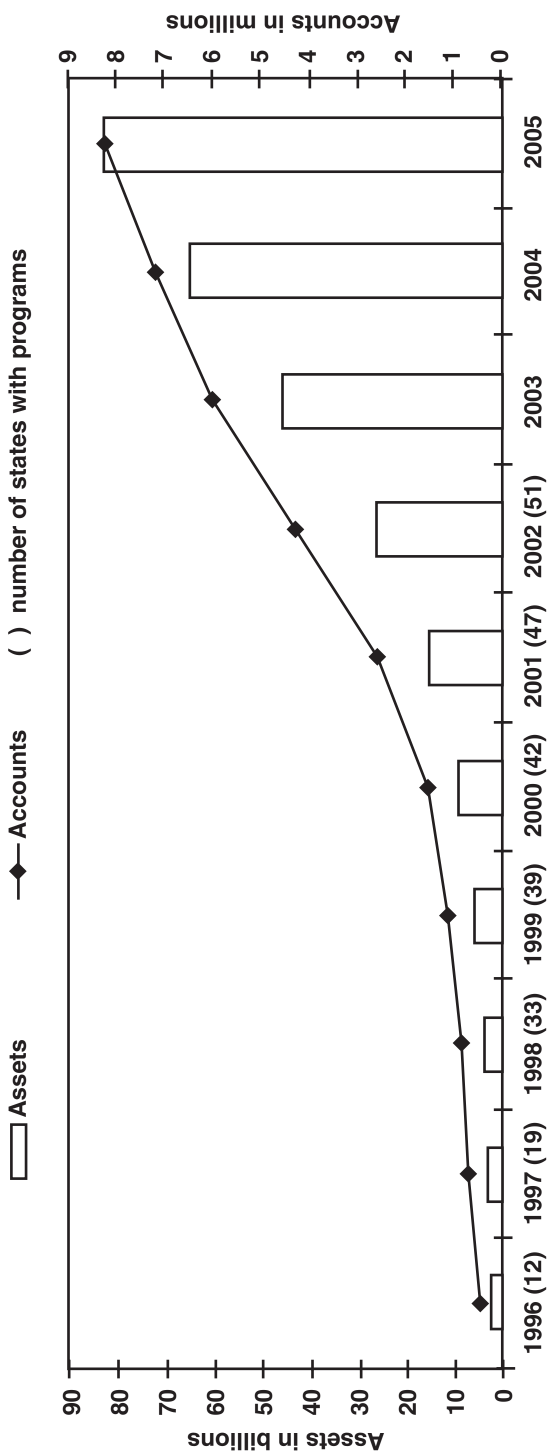
Both disclosure statements are designed to encourage clear, concise, uniform, and understandable offering materials that are updated annually for performance and other material changes. DP2 also calls for a table of contents for specific features such as investment options, performance of investment options, fees and costs, federal and state tax considerations, and an overview of the risk factors (e.g., investment losses, tax law changes, changes in fees, eligibility for financial aid). For example, DP2's specific fee and expense guidelines include disclosure of all fees and costs be in one section of the offering materials. The offering materials should identify all fee recipients (e.g., State issuer, program manager, and investment manager) and explain the fee structure. DP2's suggested fee tables (see Figure 3) have more expense detail than DP1's. DP2 also allows alternative tabular presentations if as specific as the suggested table.

Finally, DP2 addresses plan governance, administrative structure, and contact information disclosures. DP2 , however, is voluntary and was not designed to be a comprehensive disclosure list. In addition, DP2 does not suggest that alternative disclosure practices could not be acceptable and was not intended to provide authoritative guidance to 529 managers and brokers. To date, 43 states and DC have implemented DP2 in their offering materials and five states have implemented DP1 (See Figure 4).

SELECTING A 529 PLAN

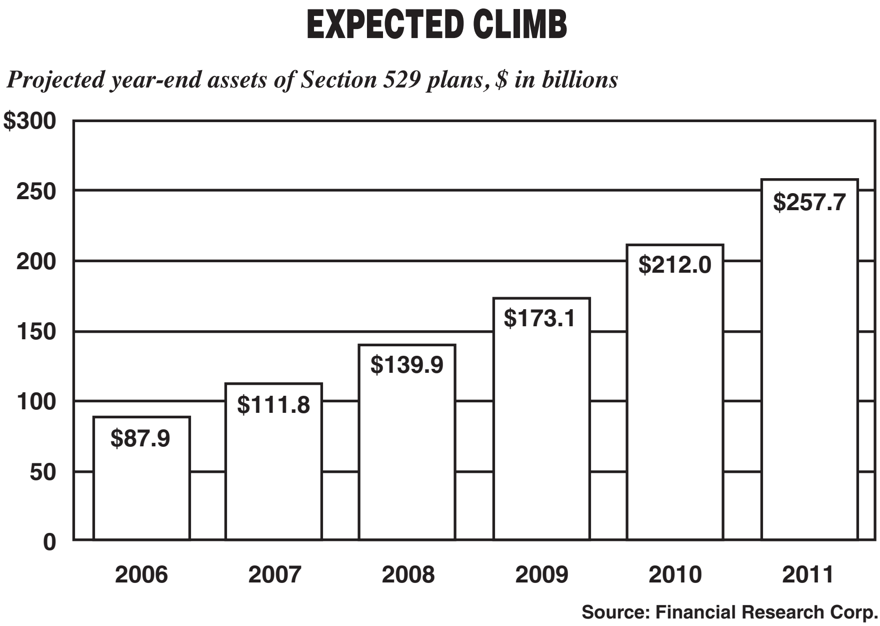
Prior to the disclosure of historical performance and the adoption of CSPN disclosure principles, lack of uniform disclosures made comparing 529 plan investment performance very difficult. Inves-

Figure 1: **529 Assets and Accounts 1996-2005**



Source: CSPN

Figure 2: **Projected 529 Assets 2006-2011**



tors of the 529 plan must navigate through numerous portfolios, plans, and plan attributes, some of which are difficult to process (i.e., fee structure) or to assign a value (i.e., portability of benefits). To make purchase decisions, investors face a "costly search" process in which information is gathered about tax benefits, fees, plan features, and the fund family. Investors have difficulty determining whether the differences in reported investment performance were due to different stock and bond weights in the portfolio, different expenses in the underlying funds, or varying success of the investment managers in picking stocks and bonds. In response, investors frequently use rating services (i.e., Morningstar) and financial literature to assist in the decision-making process.

This research builds on AL (2005) which investigates factors affecting 529 plan investors' choice. AL (2005) find that in the absence of historic returns, investments flow to funds that are larger, older, and have higher fees. Furthermore, many investors invest in out-of-state plans and therefore lose available tax deductions for contributions to their own state's plan. These results suggest that investors find the search process for 529 plan information costly and rely on media attention and/or broker advice to select 529 plan investments.

SUMMARY OF STUDY AND FINDINGS

In 2003, after the AL (2005) sample time period, detailed historic return data became publicly available, enabling investors to more easily compare investment performance across plans. Under pressure from regulators, 529 plan marketers also began disclosing state tax benefits, which were often available only for in-state investments. Prior research finds that investors make purchase decisions based upon prior returns (Sirri and Tufano, 1998; Chevalier and Ellison, 1997; Ippolito, 1992). Therefore, we examine how 529 plan investors respond to additional disclosures of historic investment returns and state tax deductions.

Data

We use a proprietary commercial database that includes information on 86,529 plans for the quarters ending December 31, 2001, through March 31, 2005. For each plan, the database contains total assets under management, number of accounts by

Figure 3: **Example Fee Chart for Inclusion in Offering Materials**

Investment Options	Fee Structure A							
		Annual Asset-Based Fees					Additional Investor Expenses	
	Estimated Underlying Fund Expenses	Program Manager Fee	State Fee	Misc. Fees	Annual Distribution Fee	Total Annual Asset-Based Fees	Maximum Initial Sales Charge	Annual Account Maintenance Fee
Name	xx%	xx%	xx%	xx%	xx%	xx%	xx%	$xx
Etc.	xx%	xx%	xx%	xx%	xx%	xx%	xx%	$xx

Source: CSPN

quarter, and date established. We supplement this data with hand-collected material from several sources. We gather state tax information from Commerce Clearing House, a commercial tax service. Plan characteristics such as distribution channels and investment choices are collected from Savingforcollege.com and verified against fund prospectuses. Distributors' assets under management data are gathered from corporate Web sites and personal phone calls. Morningstar provided monthly returns for each 529 plan portfolio.

Model

We perform our empirical analysis using a panel model with random effects for each 529 plan over 14 quarters from fourth quarter, 2001 through first quarter, 2005. We define our primary dependent variable as the new investment amount by 529 plan by quarter, consistent with Sirri and Tufano (1998). Formally, *FLOW* is calculated as:

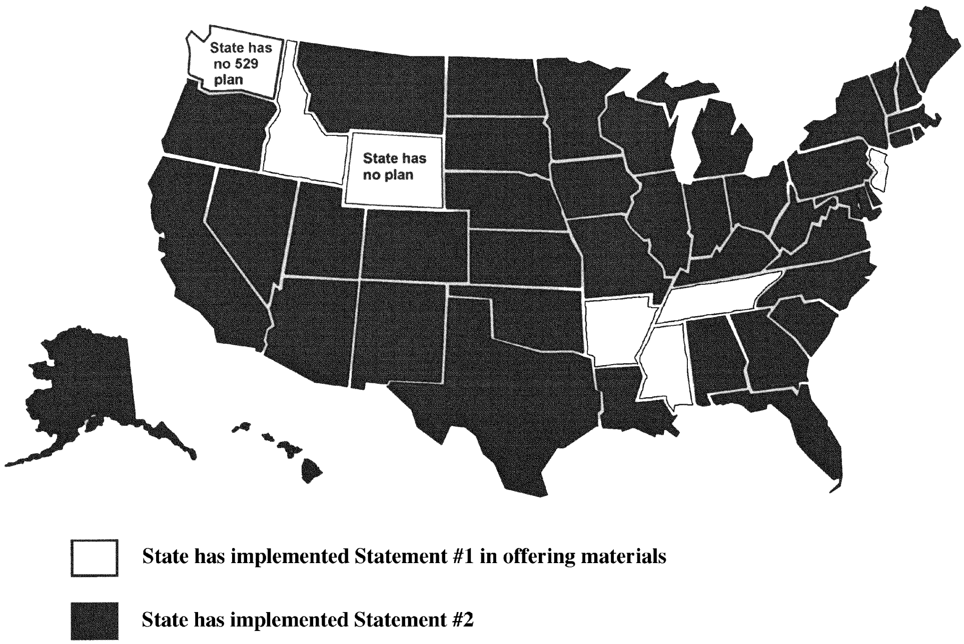
$$FLOW_{it} = ASSETS_{i,t} - ASSETS_{i,t-1} * (1 + R_{i,t}),$$

where $ASSETS_{i,t}$ is fund i's total net assets at time t, and $R_{i,t}$ is the fund's return, adjusted for fees, over the prior quarter. Thus, *FLOW* represents new money invested in the plan that is not attributable to returns. We model 529 plan demand by regressing *FLOW* on various plan characteristics. In general, investors may choose a plan because of high investment returns, low fees, a favorable impression of the plan manager, tax advantages, and various attractive plan features (AL, 2005). A full discussion of the variables and model is presented in Alexander and Luna (2006).

Descriptive Results

On average, $42.6 million (s.d. = 96.6) of new money flowed into 41,115 529 accounts. The plans have a mean asset value of $408 million. On average, these plans are 9.5 quarters old (s.d. = 7.4) and earned an average quarterly return of 2.16 percent. The growth rate of 529 plans during our time period shows significant volatility ranging from -31.6 percent to 210 percent in a single quarter. The largest growth in 529 plans occurred in 2002, with the first and second quarter showing the largest growth of 89 percent and 146 percent, respectively. This is not surprising since the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) offered several new federal tax benefits,

Figure 4: **Implementation of CSPN Disclosure Principles No. 2**



Source: CSPN

including tax free distributions of contributions and earnings used for qualified educational expenses. Growth as a percentage has slowed considerably since 2002. Traditionally, 529 plans experience fastest growth during the last quarter of each year.

Regression Results

We divide our sample into two subsamples to reflect pre-disclosure and post-disclosure of investment returns. Because plans began disclosing performance returns gradually on Morningstar beginning in 2003, our pre-disclosure subsample begins with the third quarter of 2001 and ends with the fourth quarter 2002. Our post-disclosure subsample begins with first quarter, 2003 and ends with first quarter, 2005.

For the pre-disclosure subsample, investment returns are positive but not statistically significant. In the post-disclosure subsample, the investment returns' positive coefficient becomes highly significant. These results indicate that post-disclosure, 529 plans with higher investment returns attract more new investments. Thus, we find support for the theory that historic return disclosures are useful to investors and/or the investment community. Surprisingly, we do not find that state tax benefits affected investment patterns in the pre-or post-disclosure subsamples.

CONCLUSION

Within a few short years, Section 529 savings plans have undergone a radical transformation from a small, niche product to a fast growing, attractive savings vehicle for individuals at all income levels. As the plans have grown in size and popularity, states and private information providers have made tremendous progress making the plans easier to understand and facilitating comparisons across plans so that investors can make informed decisions about which plan best fits their needs. We examine investment flows before and after historical returns are disclosed and find that investors are responding to the disclosure by investing in those funds with nominally higher historic returns.

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