



8-1-2019

# Keystone Scholars: A State-wide Pennsylvania Child Savings Accounts Initiative

Robert A. Nathenson

*University of Pennsylvania*, [robertna@upenn.edu](mailto:robertna@upenn.edu)

Amanda Jones-Layman

*University of Pennsylvania*, [ajon@upenn.edu](mailto:ajon@upenn.edu)

Follow this and additional works at: [https://repository.upenn.edu/cpre\\_policybriefs](https://repository.upenn.edu/cpre_policybriefs)

 Part of the [Higher Education Commons](#)

## Recommended Citation

Nathenson, Robert A. and Jones-Layman, Amanda. (2019). Keystone Scholars: A State-wide Pennsylvania Child Savings Accounts Initiative. *CPRE Policy Briefs*.

Retrieved from [https://repository.upenn.edu/cpre\\_policybriefs/86](https://repository.upenn.edu/cpre_policybriefs/86)

This paper is posted at ScholarlyCommons. [https://repository.upenn.edu/cpre\\_policybriefs/86](https://repository.upenn.edu/cpre_policybriefs/86)

For more information, please contact [repository@pobox.upenn.edu](mailto:repository@pobox.upenn.edu).

---

# Keystone Scholars: A State-wide Pennsylvania Child Savings Accounts Initiative

## **Abstract**

In 2019 the Pennsylvania Treasury launched a state-wide children's savings account (CSA) initiative, [Keystone Scholars](#). Keystone Scholars provides \$100 in college savings to eligible families - all children born or adopted in Pennsylvania after January 1, 2019. In this introductory research brief, we describe how CSAs are an important tool for families to increase educational expectations and asset accumulation, particularly for college savings, offer a preliminary look into college savings accounts in Pennsylvania, and explore how the Pennsylvania Treasury is using data-driven insights to encourage college savings of Pennsylvanian households.

## **Keywords**

Keystone Scholars

## **Disciplines**

Education | Higher Education

## Keystone Scholars: A State-wide Pennsylvania Child Savings Accounts Initiative

Robert A. Nathenson, Phil Sirinides, and Amanda Jones-Layman <sup>a</sup>

<sup>a</sup>Graduate School of Education, University of Pennsylvania

### Introduction

In 2019 the Pennsylvania Treasury launched a state-wide children's savings account (CSA) initiative, [Keystone Scholars](#). Keystone Scholars provides \$100 in college savings to eligible families - all children born or adopted in Pennsylvania after January 1, 2019. In this introductory research brief, we describe how CSAs are an important tool for families to increase educational expectations and asset accumulation, particularly for college savings, offer a preliminary look into college savings accounts in Pennsylvania, and explore how the Pennsylvania Treasury is using data-driven insights to encourage college savings of Pennsylvanian households.

### Children's Savings Accounts: Purpose, Research, and Growth in Popularity

Children's Savings Accounts, also referred to as Child Development Accounts (CDAs), are financial accounts designed to help children accumulate assets. Originally introduced in 1991,<sup>1</sup> CSAs have gained widespread traction in the last two decades, leading to both policy changes and demonstration projects in the United States and other countries.<sup>2</sup> While there is no federal policy for CSAs, an estimated 475,000 children were enrolled in 65 programs across 34 states last year.<sup>3</sup> Much of the growth in participation in CSAs is due to statewide programs that enroll all children born or entering school at kindergarten, such as Maine, Nevada, Rhode Island and Connecticut,<sup>4</sup> with new programs recently launching in Massachusetts and Pennsylvania. The introduction of Keystone Scholars is anticipated to increase the number of children with CSA accounts up to 30%. Implementing a CSA program can be conceptualized as an effort to universalize long-term asset accumulation, moving beyond current policies that favor accumulation for high-income households.<sup>5</sup>

While program details vary widely, CSAs are known for focusing on long-term asset building, providing a financial incentive (such as Keystone Scholars' initial \$100), and requiring funds be used for a specific purpose (most often higher education).<sup>6</sup> CSAs build assets through both family contributions and through additional funds from public and third-party sources. For instance, a state government or third-party may incentivize families to open an account by seeding the account with a \$50 initial deposit.<sup>7</sup> Such incentive funds are an important tool to help facilitate CSA use. A recent randomized control trial in Massachusetts found that a \$50 initial incentive encouraged nearly one-quarter of families (22.5%) to open their own CSA account, which was more than ten times the group that received assistance in opening the account but no financial incentive.<sup>8</sup> While CSAs are often incentivized,<sup>9</sup> particularly in the form of initial deposits and milestone deposits given at noteworthy events in a child's life,<sup>10</sup> not all CSAs provide initial or matching funds. Many CSAs are universal (every child included) and progressive (subsidies for low- and moderate-income children).<sup>11</sup>

### Keystone Scholars

Keystone Scholars is a statewide CSA program created by the Pennsylvania Treasury, led by the current Treasurer, Joe Torsella. It was launched as a pilot program in six counties in 2018. Later that year, the Pennsylvania General Assembly passed a law to expand the program statewide on January 1, 2019. It is of particular interest to the expanding field of CSAs, policymakers, and the research community. The universal rollout to approximately 140,000 children each year in Pennsylvania makes Keystone Scholars the largest CSA program in the country to date, and will dramatically increase the number of children participating in a CSA from the current number of 475,000 children nationwide.

Going forward, every Pennsylvanian family that has a new baby or adopts a child is eligible for \$100 that can be used for the child's future higher education expenses. The universal eligibility of babies born in the state and automatic, opt-out enrollment of babies ensures that Keystone Scholars is fully inclusive.<sup>12</sup> In addition, Keystone Scholars meets nearly every key design element of successful CSA

programs, as recommended in *Taking Child Development Accounts to Scale: Ten Key Policy Design Elements*.<sup>13</sup> The \$100 will grow over-time at an average rate of tuition inflation of higher education institutions in Pennsylvania. While the \$100 is available to all eligible families, the Treasury advises parents to register their child for the program so that they can claim the \$100. Families are encouraged to open and contribute to their own individual College Savings Account.

### **Impact of CSAs on Long-Term Trajectories**

Research and policy efforts have demonstrated several mechanisms through which CSAs can positively impact children and families. Household assets, especially financial assets, can have a positive association with children's educational attainment and other developmental outcomes.<sup>14</sup> For instance, early findings of the SEED for Oklahoma Kids experiment (SEED OK, a randomized control trial of CSAs), suggest that CSAs have positive effects on savings, asset accumulation, and educational expectations. Four years into the program, parents in SEED OK's treatment group maintained statistically significantly higher educational expectations for their children than families in the control group.<sup>15</sup> Because higher expectations in primary school and secondary school are predictive of college enrollment,<sup>16</sup> maintaining high educational expectations from an early age is a critical condition for postsecondary attainment. Additionally, the integration of CSAs with other social services for vulnerable families has positive, statistically significant impacts on financial and social-development outcomes.<sup>17</sup> By "providing funds for college to all children and providing these funds early in life," CSAs may increase the chances that both parents and children "view children as college-bound," triggering other attitudinal and behavioral changes that mutually reinforce college-going through educational achievement.<sup>18</sup>

### **Implementing CSAs through 529 College Savings Accounts**

The largest state-wide CSA programs leverage existing tax-advantaged 529 plans to deliver accounts at scale. 529 plans are federally-sanctioned college savings accounts that are funded via post-tax contributions that can be used to lower a household's state adjusted gross income, grow tax-free over-time, and can be withdrawn tax-free for a broad range of higher education-related expenses.<sup>19</sup> 529 accounts are the predominant formal savings vehicle for postsecondary education. Nationally, families hold close to \$250 billion in assets in these accounts.<sup>20</sup>

In Pennsylvania, families choose between two types of 529 accounts – either a Guaranteed Savings Plan (GSP - low-risk accounts with a guaranteed growth rate tied to tuition tier, e.g. PA community college, Ivy league) or an Investment Plan (IP - a market-based option through a family of Vanguard funds). Families can then choose to setup automated contributions (preset monthly deposits) or contribute on a non-automated ad hoc basis (the default option). The minimum contribution amount for a Guaranteed Savings Plan is \$15 and \$25 for an Investment Plan.

The joining of CSAs with 529s has helped shape 529s in ways that make them more inclusive for families of all income levels. For instance, by reducing minimum contribution amounts and eliminating initial contribution requirements, 529 plans may reduce barriers that limit or deter take-up and ongoing participation by low-income families.<sup>21</sup> 529 plans can therefore be viewed as an effective means to scale CSAs quickly and to bring the benefits of tax-advantaged college savings to a broader set of households beyond high-income households with high levels of educational attainment. Keystone Scholars is administered as part of the Pennsylvania Treasury's state-based 529 program.

The centralized and state-sponsored aspects of 529 programs also have some noted benefits for ensuring all families are included in CSAs. State sponsorship has the potential to increase data-sharing among state and state-contracted organizations, "which makes possible universal eligibility and efficient automatic, at-birth enrollment" two design elements that hold promise for scaling CSA programs.<sup>22</sup> These features of 529s can also reduce administrative burdens, facilitating the administration of financial incentives to families (such as startup and milestone matching funds).

Despite the substantial benefits to operating CSAs through 529s, several potential barriers remain to widespread uptake. Financial literacy remains a concern. The same Massachusetts study described above also finds (across treatment and control groups) evidence of poor financial understanding of the

long-term benefits to saving for higher education through 529s, how saving could impact financial aid eligibility, and being able to save enough to make a difference in the cost of attendance.<sup>23</sup>

### Improving College Savings in Pennsylvania

In addition to Keystone Scholars, the Pennsylvania Treasury is using existing records on households participating in PA’s 529 College Savings Program to inform strategies that encourage college savings. In total, the data includes records of over 280,000 accounts of Pennsylvania residents, including quarterly contribution and withdrawal information starting in 2006, as well as household id, account id, and investment type (GSP or IP). It also includes zip code, university tuition tier, account owner age, beneficiary age, account status (open or closed), whether the account receives automated contributions, and (for a subset) institution of higher education attended.<sup>24</sup>

Figure 1 shows the number of account openings by year since the early 2000s, split into four account types: GSP and IP, further distinguished by whether the account owner automates contributions. The accounts are split into these categories as all families initially choose between opening a GSP and IP account and then choose whether or not to automate their contributions. Automated contributions are a way to make saving the default option, and therefore represent a powerful method to build a nest egg for college expenses. For instance, an automated GSP account set at the monthly minimum contribution of \$15 would net \$180 a year. Across 15 years with 3% growth, the account would be worth more than \$5,500.

The number of Pennsylvanian households using 529 accounts has increased over-time, with non-automated Investment Plan accounts currently the most popular option. There was a large spike in non-automated IP openings around the passage of the Pension Protection Act of 2006, which removed a sunset clause that would have made withdrawals from 529s taxable after 2010.<sup>25</sup> There were drops in IP account openings during the Great Recession, with account openings subsequently rebounding. In total, nearly 20,000 PA 529 accounts were opened in 2016.

Figure 1. PA 529 Account Openings, by Year and Account Type

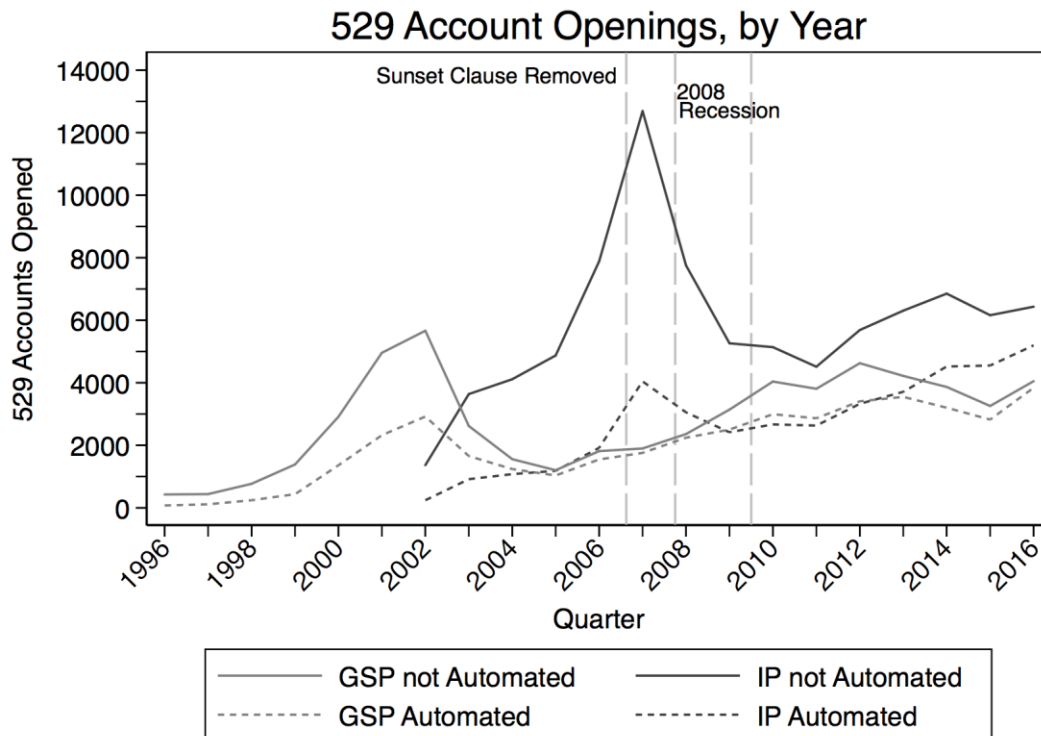


Table 1 contains descriptive information about the population of Pennsylvania residents who are PA 529 account holders, split into the same four account types shown in Figure 1. Approximately 56% of accounts are GSP and 44% IP. About 30% of all accounts are automated. Account owners are, on average, in their low-to-mid forties at the time of account opening. Automated accounts tend to have slightly younger owners, younger beneficiaries (late preschool as compared to early elementary), and have been open for fewer years.

**Table 1. Pennsylvania 529 Account Characteristics and Contributions**

<u>Account Type</u>	<u>GSP</u>		<u>IP</u>	
	<u>Not Automated</u>	<u>Automated</u>	<u>Not Automated</u>	<u>Automated</u>
Population (N)	115,736	43,219	83,812	42,665
Percent of all accounts (%)	40.55	15.14	29.36	14.95
<u>Account Characteristics</u>				
Electronic Delivery	0.68	0.92 ***	0.79	0.93 ***
Account Owner Age at Open	42.34	40.08 ***	45.29	40.20 ***
Account Beneficiary Age at Open	6.41	4.49 ***	7.82	4.52 ***
Current Owner Age	54.74	47.62 ***	52.39	45.59 ***
Current Beneficiary Age	19.55	12.02 ***	14.92	9.91 ***
Number of Years Open	9.10	7.72 ***	7.10	5.39 ***

Note: Data restricted to Pennsylvania residents through Quarter 2, 2017. \*p<0.05, \*\* p<0.01, \*\*\* p<0.001.

## Discussion

By providing \$100 to all Pennsylvania families that have a new baby or adopt a child starting in 2019, Keystone Scholars is hoping to foster and maintain high educational expectations for Pennsylvania's next generation and to incentivize building a nest egg for higher education. By starting in a child's infancy, families will be able to harness a longer-time horizon for college planning and asset accumulation than the current set of account holders, and maximize the tax free growth advantages of 529 accounts.

In addition to Keystone Scholars, the Pennsylvania Treasury's use of existing 529 account information is informing product and communication strategies to encourage college savings. This research brief series will detail some of the key insights from this data analysis. In our next brief, we will explore how account types are associated with differences in long-term contribution patterns. Future briefs will explore such topics as geographic variation in savings patterns across Pennsylvania's 67 counties.

## About the Authors

**Robert A. Nathenson, Ph.D. MSE MSc, Principal Investigator.** Dr. Nathenson is a research specialist at the [Consortium for Policy Research in Education](#) at the University of Pennsylvania's Graduate School of Education. He has expertise in experimental and quasi-experimental design, as well as in the execution of rigorous econometric and behavioral science techniques to applied policy questions in postsecondary and K-12 education. His research focuses on questions of postsecondary access, persistence, debt, and mobility for minority and low-income populations. He is Principal Investigator of the evaluation of the Pennsylvania Treasury Department's college savings account initiative, [Keystone Scholars](#). He has led research on how behavioral science techniques can help improve survey response rates (published in the *Journal of Research on Educational Effectiveness*).

**Philip Sirinides, Ph.D., Co-Principal Investigator.** Professor Sirinides is a Research Assistant Professor

at GSE and Senior Researcher at CPRE, where he plans and conducts studies in the areas of estimating intervention impacts. He is a statistician and researcher with expertise in the development and use of integrated data systems for public sector planning and evaluation. He led work on the i3 Evaluation of Reading Recovery, one of the largest randomized control trials of an educational intervention ever conducted. He served as Director of Research and Evaluation for Early Childhood at the Pennsylvania Department of Education.

**Amanda Jones-Layman, M.S.Ed Ms.** Jones-Layman is a PhD Candidate in the Graduate School of Education at the University of Pennsylvania. Her research explores organizational decision-making, learning, and practices in the implementation of educational and social innovations. Prior to her graduate studies, she designed and launched a Children's Savings Account initiative, Promise Indiana, now active in 25 counties around the state.

- 
- <sup>1</sup> Sherraden, M. 1991. *Assets and the Poor: A New American Welfare Policy*. Armonk, NY: M.E. Sharpe.
- <sup>2</sup> Cramer, R. 2010. "The big lift: Federal policy efforts to create child development accounts." *Children and Youth Services Review*. 32(11): 1538-1543.
- <sup>3</sup> Quezonda, D., Markoff, S. & Copeland, M. 2019. *The Movement Soars Ahead: The State of the Children's Savings Field 2018*. Prosperity Now.  
[https://prosperitynow.org/sites/default/files/resources/CSA\\_State\\_of\\_Field\\_2018.pdf](https://prosperitynow.org/sites/default/files/resources/CSA_State_of_Field_2018.pdf)
- <sup>4</sup> Clancy, M., & Beverly, S. (2017). *Statewide Child Development Account Policies: Key Design Elements* (No. 17–30). Retrieved from <https://doi.org/10.7936/K7G44PS2>
- <sup>5</sup> Dynarski, S.M. 2004. "Who Benefits from the Education Saving Incentives? Income, Educational Expectations and the Value of the 529 and Coverdell" *National Tax Journal* 57(2): 359-83; Hillman, N., Gast, M.J., & George-Jackson, C. 2015. "When to Begin? Socioeconomic and Racial/Ethnic Differences in Financial Planning, Preparing, and Saving for College." *Teachers College Record* 117(8): 1-28.
- <sup>6</sup> Clancy, M., & Beverly, S. (2017). *Statewide Child Development Account Policies: Key Design Elements* (No. 17–30). Retrieved from <https://doi.org/10.7936/K7G44PS2>; Kim, Y., Sherraden, M., Huang, J., & Clancy, M. (2015). Child Development Accounts and Parental Educational Expectations for Young Children: Early Evidence from a Statewide Social Experiment. *Social Service Review*, 89(1), 99–137.  
<https://doi.org/10.1086/680014>; Markoff, S. & Derbigny, D. *Investing in Dreams: A Blueprint for Designing Children's Savings Account Programs*. Prosperity Now.  
[https://prosperitynow.org/sites/default/files/resources/InvestingInDreams\\_Updated%20Oct%202017.pdf](https://prosperitynow.org/sites/default/files/resources/InvestingInDreams_Updated%20Oct%202017.pdf);
- Sherraden, Michael, Clancy, M. M., & Beverly, S. G. (2018). *Taking Child Development Accounts to Scale: Ten Key Policy Design Elements*.
- <sup>7</sup> Elliot, W., & Lewis, M. (2014). *Children's Development Accounts (Children's Savings Accounts)*.  
<https://doi.org/10.1093/acrefore/9780199975839.013.871>; Loya, R. (2017). *Children's Savings Accounts: Survey of Private Funding 2015-16*. [https://assetfunders.org/wp-content/uploads/AFN\\_2017\\_ChildrensSavingsSurvey.pdf](https://assetfunders.org/wp-content/uploads/AFN_2017_ChildrensSavingsSurvey.pdf)
- <sup>8</sup> Long, B.T. & Bettinger, E. "Simplification, Assistance, and Incentives: A Randomized Experiment to Increase College Savings." [https://scholar.harvard.edu/files/btl/files/long\\_bettinger\\_-\\_rct\\_to\\_increase\\_college\\_savings\\_2017-4-26.pdf](https://scholar.harvard.edu/files/btl/files/long_bettinger_-_rct_to_increase_college_savings_2017-4-26.pdf)
- <sup>9</sup> Elliott, W., Choi, E. H., Destin, M., & Kim, K. H. (2011). The age old question, which comes first? A simultaneous test of children's savings and children's college-bound identity. *Children and Youth Services Review*, 33(7), 1101–1111. <https://doi.org/10.1016/j.childyouth.2011.02.001>; Elliott, W., Destin, M., & Friedline, T. (2011). Taking stock of ten years of research on the relationship between assets and children's educational outcomes: Implications for theory, policy and intervention. *Children and Youth Services Review*, 33(11), 2312–2328. <https://doi.org/10.1016/j.childyouth.2011.08.001>
- <sup>10</sup> Sherraden, Michael, Clancy, M. M., & Beverly, S. G. (2018). *Taking Child Development Accounts to Scale: Ten Key Policy Design Elements*.
- <sup>11</sup> Clancy, M., & Beverly, S. (2017). *Statewide Child Development Account Policies: Key Design Elements* (No. 17–30). Retrieved from <https://doi.org/10.7936/K7G44PS2>; Sherraden, M., Clancy, M., Nam, Y., Huang, J., Kim, Y., Beverly, S., ... Purnell, J. Q. (2018). Universal and Progressive Child Development Accounts: A Policy Innovation to Reduce Educational Disparity. *Urban Education*, 53(6), 806–833.  
<https://doi.org/10.1177/0042085916682573>

- 
- <sup>12</sup> Clancy, M., & Beverly, S. (2017). *Statewide Child Development Account Policies: Key Design Elements* (No. 17–30). Retrieved from <https://doi.org/10.7936/K7G44PS2>
- <sup>13</sup> Sherraden, Michael, Clancy, M. M., & Beverly, S. G. (2018). *Taking Child Development Accounts to Scale: Ten Key Policy Design Elements*.
- <sup>14</sup> Conley, D. (2001). Capital for college: Parental assets and postsecondary schooling. *Sociology of Education*, 74, 59–72.
- <sup>15</sup> Beverly, S., Clancy, M., & Sherraden, M. (2016). *Universal Accounts at Birth: Results from SEED for Oklahoma Kids*. Research Summary 1607, Center for Social Development; Nam, Y., Kim, Y., Clancy, M., Zager, R., & Sherraden, M. (2013). Do Child Development Accounts Promote Account Holding, Saving, and Asset Accumulation for Children’s Future? Evidence from a Statewide Randomized Experiment: CDAs Promote Account Holding, Saving, and Asset Accumulation. *Journal of Policy Analysis and Management*, 32(1), 6–33. <https://doi.org/10.1002/pam.21652>; Kim, Y., Sherraden, M., Huang, J., & Clancy, M. (2015). Child Development Accounts and Parental Educational Expectations for Young Children: Early Evidence from a Statewide Social Experiment. *Social Service Review*, 89(1), 99–137. <https://doi.org/10.1086/680014>
- <sup>16</sup> Britton, T. (2019). The Best Laid Plans: Postsecondary Educational Expectations and College Enrollment in Massachusetts. *The Journal of Higher Education*.
- <sup>17</sup> Huang, J., Beverly, S.G., Kim, Y., Clancy, M., & Sherraden, M. 2019. *Journal of Consumer Affairs*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/joca.12239>
- <sup>18</sup> Sherraden, M., Clancy, M., Nam, Y., Huang, J., Kim, Y., Beverly, S., ... Purnell, J. Q. (2018). Universal and Progressive Child Development Accounts: A Policy Innovation to Reduce Educational Disparity. *Urban Education*, 53(6), 806–833. <https://doi.org/10.1177/0042085916682573>
- <sup>19</sup> Pennsylvania College Savings Program. “PA 529 Learn.” <http://www.pa529.com/learn/>
- <sup>20</sup> The College Board. 2015. “Total Assets in 529 College Savings Plans over Time.” <https://trends.collegeboard.org/student-aid/figures-tables/total-assets-529-college-savings-plans-over-time>
- <sup>21</sup> Clancy, M., & Beverly, S. (2017). *Statewide Child Development Account Policies: Key Design Elements* (No. 17–30). Retrieved from <https://doi.org/10.7936/K7G44PS2>
- <sup>22</sup> Sherraden, M, Clancy, M. M., & Beverly, S. G. (2018). *Taking Child Development Accounts to Scale: Ten Key Policy Design Elements*.
- <sup>23</sup> Long, B.T. & Bettinger, E. “Simplification, Assistance, and Incentives: A Randomized Experiment to Increase College Savings.” [https://scholar.harvard.edu/files/btl/files/long\\_bettinger\\_-\\_rct\\_to\\_increase\\_college\\_savings\\_2017-4-26.pdf](https://scholar.harvard.edu/files/btl/files/long_bettinger_-_rct_to_increase_college_savings_2017-4-26.pdf)
- <sup>24</sup> American Community Survey. 5-Year Estimates. [https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=survey&id=survey.en.ACS\\_ACS](https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=survey&id=survey.en.ACS_ACS)
- <sup>25</sup> August 14, 2006. “Pension bill makes 529 tax exemption permanent.” <https://www.savingforcollege.com/questions-answers/article/pension-bill-makes-529-tax-exemption-permanent>